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ARTICLE

Determining the Emotions and Views of Patients with Post-Cesarean Surgical Site Infection: A Qualitative Study

Elçin Alaçam[1,*] and Mualla Yılmaz[2]

[1]Healthcare Services Management, Mersin City Training and Research Hospital, Mersin, 33240, Türkiye
[2]Faculty of Nursing, Mersin University, Mersin, 33343, Türkiye
*Corresponding Author: Elçin Alaçam. Email: elcin-unal@hotmail.com

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ABSTRACT: Background: Post-cesarean surgical site infection is a frequent complication with significant consequences for maternal, physical, and psychological well-being. This study explored women's lived experiences of post-cesarean surgical site infection, focusing on emotional responses, treatment experiences, and perceived psychosocial impact. **Methods:** A qualitative study was conducted using thematic analysis of semi-structured interviews with 23 patients hospitalized due to post-cesarean surgical site infection, selected through purposeful sampling between 15 August 2022, and 15 January 2024. **Results:** The mean age of the participants in the study was 28.69 ± 5.07 years. Of them, 13 were high school graduates, and 22 were unemployed. According to the obstetric characteristics of the participants, seven participants had their third pregnancy, nine participants had one living child, and 14 participants underwent cesarean section for the first time. The analysis of data, one main theme (Receiving surgical site infection treatment from the participants' perspective) and five subthemes (Searching for explanations: uncertainty, blame, and distrust, Pain, uncertainty, and the weight of care, disrupted roles and the strain on family bonds, Participants' emotions, Effects of the treatment process on mental health) emerged. **Conclusions:** Findings highlight significant psychosocial distress, family role disruption, and unmet information needs, underscoring the importance of integrated mental health and nursing support in post-cesarean surgical site infection care.

KEYWORDS: Surgical site infection; cesarean section; patient experiences; qualitative research

1 Introduction

Cesarean section is among the most common surgical procedures worldwide, accounting for approximately 21% of all births globally, with rates exceeding 50% in some countries. While cesarean delivery is often medically indicated to reduce maternal and neonatal risk, an increasing proportion are performed electively, reflecting diverse clinical practices, maternal preferences, and institutional factors. Global cesarean rates are not evenly distributed, with much higher rates in some middle- and high-income countries, often reflecting structural and cultural factors such as access, institutional norms, and medico-legal pressures. This has raised concerns about the medicalization of childbirth and inequalities in maternal care [1–4]. Cesarean section, like other surgeries, can cause complications affecting both the women and her family. Post-cesarean surgical site infection (SSI) is one such complications. SSI after cesarean section can arise from factors including obesity, prolonged or emergency surgery, maternal diabetes, or omission of prophylactic antibiotics [5–8].

Beyond the immediate clinical risks, SSI can profoundly affect women's sense of identity, emotional well-being, and ability to fulfil maternal and family roles. Previous studies conducted on women who have had a cesarean section have highlighted the pain, suffering, and difficulty in physical activities, the negative

impact on the maternity process due to cesarean section, and the importance of psychosocial support and information provided by healthcare professionals in their well-being [9–11]. Having a cesarean section itself appears to cause physical, emotional, and spiritual distress for women. A SSI following cesarean section can not only prolong the recovery process but also negatively impact their physical, emotional, and mental well-being. Studies involving individuals with SSI following surgery report feelings such as shame, disgust, anger, and sadness due to shifts in family roles and challenges in meeting the needs of their babies and other children. Furthermore, one study identified participants experiencing breastfeeding difficulties due to the treatment process. This finding also suggests that women with post-cesarean SSI experience challenges related to their motherhood process. As stated in several studies, SSI negatively affects individuals physically, emotionally, psychologically, socially, and within family life [8,12–15].

The literature review showed that several studies involving post-cesarean SSI patients have examined causative factors, incidence, and the efficacy of preventive measures. While biomedical risk factors and prevention have been widely examined, little is known about women's lived experiences of post-cesarean SSI, particularly how it affects maternal identity, family roles, and psychological well-being. Previous qualitative research has highlighted the emotional toll of cesarean recovery, including distress and disruptions to maternal identity [9–11]. However, there remains limited research specifically exploring women's lived experiences of SSI. In the limited studies conducted, it has been determined that women who develop SSI after cesarean section experience difficulties in many areas of their lives, which negatively affects their mental health. This underscores the importance of investigating their feelings, thoughts, and experiences. Moreover, although quantitative studies have addressed prevention and etiology, there is a paucity of studies examining the mental health of these patients. Addressing these gaps in the literature will better enable healthcare professionals to provide comprehensive care.

This qualitative study was designed to address the gap in the literature. This study was conducted qualitatively to concretize the experiences of women with SSI after cesarean section, to reveal sociocultural factors and relational dynamics, and to determine coping methods. Furthermore, studies conducted on women who have undergone both cesarean and limited SSI have revealed that the protective factor that comes to the fore in terms of adverse effects on the motherhood process and mental health is the provision of information by healthcare professionals. In this context, when providing care to women with SSI, healthcare professional must first understand these individuals' experiences and their emotional, physical, and mental needs. Consequently, this study aimed to explore women's lived experiences of post-cesarean SSI, focusing on their emotional responses, treatment interactions, and psychosocial consequences. The present study is expected to contribute to a better understanding of the feelings, views, and experiences of patients with post-cesarean SSI and to provide guidance to healthcare professionals who care for these individuals in giving holistic care.

2 Methods

2.1 Study Design

This study aimed to explore women's lived experiences of post-caesarean SSI, focusing on their emotional responses, treatment interactions, and psychosocial consequences. A qualitative descriptive approach was adopted. Qualitative research was chosen for its capacity to capture the complex ways in which SSI shapes women's identities, relationships, and coping, which cannot be fully understood through quantitative methods [16–18]. In reporting the present study, the guidelines stated in the Consolidated Criteria for Reporting Qualitative Research (COREQ) were followed [19].

Researchers can obtain ethics committee approval from two universities in their province, and it is up to the researchers to decide which institution to choose. Therefore, in this study, before the study

was conducted the researchers obtained ethics committee approval (decision date: 24 June 2022, decision number: 122) from Toros University Scientific Research and Publication Ethics Committee, and institutional permission from the hospital where the study was to be conducted were obtained. Before the interviews were started, the participants were informed about the scope of the study and data confidentiality in detail and they were told that the interviews would be audio recorded. Then their written consent was obtained.

2.2 Sample and Setting

The purposive sampling method was used in the present study. Research data were collected from 23 patients with post-cesarean SSI (3 patients declined participation) at a training and research hospital in Mersin, Türkiye, between 15 August 2022, and 15 January 2024. The clinic has 18 rooms, comprising 12 single rooms and 6 double rooms, with a total of 24 beds. Participants receive treatment in single rooms. The inclusion criteria of patients were as follows: having a diagnosis of post-cesarean SSI, being ≥18 years old, volunteering to participate in the study, and being able to write and read in Turkish. In qualitative studies, researchers collect data until reaching saturation. Saturation is a cornerstone in determining sample sizes in qualitative research, often achieved with 9–17 interviews or 4–8 focus groups. The study's aim, population, sampling strategy (inductive or deductive), data type, and saturation goal also affect this number [16–18]. In this study, recruitment continued until no new codes or insights were identified during the comparison of both researchers' coding in the data (n = 20). Three additional interviews were conducted to confirm saturation (final n = 23).

2.3 Data Collection

The research data were collected through face-to-face interviews using a qualitative design with semi-structured questions. Before conducting the interviews, researchers thoroughly explained the study's purpose and methodology to participants. Each interview was conducted and recorded by the same interviewer using a voice recorder. Two participants declined audio recording; their responses were recorded in detailed notes. We acknowledge that this may have limited the depth of data (e.g., tone, pauses) compared with transcripts. To ensure that these two written records do not differ from the audio recordings in their analysis, factors such as gestures, facial expressions, tone of voice, and pauses used by the individuals were noted, similar to the field notes taken during the audio recording. At the outset, participants were informed that their views were valuable and that they could express themselves freely. Interviews took place in patient room, attended only by the researcher and participant, to promote open expression. To maintain consistency, the same interview method and questions were used for all sessions. Before formal questions began, an introductory conversation was held until participants felt comfortable. Sociodemographic and obstetric questions were asked first, followed by semi-structured questions. Interviews, conducted in Turkish, lasted approximately 30 to 40 min each. For credibility, patient views were included, along with explanatory notes, in the results. Pseudonyms [Participant (P)1, P2, …P23] were used to protect privacy.

The two researchers who conducted the study received training on qualitative research and they are experienced in qualitative research. One is a faculty member in the nursing department of a state university in Türkiye, and the other is a specialist nurse at the hospital where the study was conducted. As the interviewers were nurses, we considered how professional roles and potential power dynamics may have influenced what participants chose to share. Reflexive notes were kept throughout the study. Data were collected at the participating patients' bedsides during the hours and days available to them, using the Personal Information Form and Semi-Structured Individual In-Depth Interview Form through face-to-face individual interviews. Sociodemographic questions (e.g., age, education, obstetric history) were included to provide context for interpreting women's experiences. The semi-structured interview guide was developed

from the literature, refined through expert feedback, and trialed with two participants to ensure clarity; these participants were retained in the final dataset. Semi-Structured Individual In-depth Interview Form included the following seven questions (Table 1).

Table 1: Semi-structured interview form.

Questions
1. What is SSI?
2. You are being treated in the hospital for SSI. What does this mean for you?
3. Could you explain your family's approach to your being treated in the hospital due to SSI?
4. Could you describe your experiences while you are being treated in the hospital for SSI?
5. Could you state your positive/negative memories of being treated in the hospital due to SSI?
6. Could you explain your coping strategies while you are treated in the hospital for SSI?
7. Could you explain your expectations from healthcare professionals during the hospital treatment process for SSI?

2.4 Data Analysis

In the data analysis of this study, sociodemographic characteristics of participants were evaluated using numbers, mean, and standard deviation. In the analysis of qualitative data, thematic analysis was conducted using the MAXQDA Analytics Pro 2020 (VERBI Software, Berlin, Germany) program, which involved the following sequential steps: (1) familiarization with the data, followed by (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and finally (6) producing the report [20], all in accordance with an inductive approach.

Interview records were first transcribed verbatim (both researchers reviewed the transcripts for accuracy) and combined with observation notes to create the raw data. Both researchers read the raw data repeatedly to gain a comprehensive understanding and noted coding ideas. Then, both researchers independently and systematically coded and grouped the data into meaningful categories using the MAXQDA program with an inductive approach. Both researchers came together to compare the code lists. As researchers with nursing backgrounds, we reflected on how our professional roles may have influenced coding and interpretation. Both researchers made changes to the code lists and organized the codes into themes relevant to the research objective, and the most meaningful themes were identified. The researchers checked if the themes supported the coded quotes and the data. Both researchers critically evaluate the data and suggest names for themes and subthemes that best describe the findings, then agree on names before completing the report.

2.5 Validity and Reliability of the Study

The validity and reliability of the study were assessed based on the principles of credibility, transferability, dependability, and confirmability, which are essential components of qualitative research [16, 21,22]. Within the scope of the credibility principle, a comprehensive literature review was conducted to prepare the semi-structured interview questionnaire. Pilot data collection was then performed on two patients, and the final version was developed with expert input. Before the data were collected, participants were informed in detail about the study. The opinions of the participants were obtained by asking open-ended questions prepared in advance after they were told that there were no correct answers to the questions. Then, the researcher conducted the face-to-face interviews. It was foreseen due to the length of the data collection process, and since we could not reach the participants after their discharge, transcripts and themes cannot be shared back with participants. Therefore, during the data collection process, the possible meanings of the participants' statements were confirmed using repetition and summarization techniques, and researchers included verbatim quotations in the findings. The analysis and interpretation

of the study data by multiple researchers have increased its reliability (peer debriefing). To ensure accuracy and reliability regarding the research data collection tools, theme, subthemes, and content, researchers obtained feedback from two experts in the fields of qualitative research and psychiatric nursing, and these documents were stored. Upon completion of this review, the analysis of this study was finalized. Within the scope of the transferability principle, the research context and characteristics of the participants, as well as the clinic where the study was conducted, are described in detail. The study was conducted with a purposive sample appropriate to the study's purpose, and the data obtained were presented with detailed descriptions and illustrative quotations to enable readers to assess how the findings may apply to other contexts. This ensures that the study findings are reliable for understanding the feelings, thoughts, and experiences of women treated for SSI after cesarean section. Within the scope of the dependability principle, the researchers used the same forms throughout all stages of the study; the data were presented without interpretation and without any changes. The coding and theme identification stages of the analysis process were systematically carried out by the researchers using the MAXQDA program, and both researchers recorded their data. Furthermore, the research design, data collection, and analysis process (MAXQDA logs, coding notes) of this study are explained in a transparent and detailed manner. Finally, within the scope of the confirmability principle, the participants' statements were directly given in the study findings, while nuances such as participants' tone of voice, pauses, and crying are indicated in parentheses. The use of direct quotations and nuances ensured that all findings were based on participants' statements. The key documents (e.g., coding framework, field notes, analytic memos) were retained for review when necessary.

3 Results

The mean age of the participants in the study was 28.69 ± 5.07 years. The participants' sociodemographic and obstetric characteristics are given in Table 2. As a result of the thematic analysis of the data, one main theme and five subthemes emerged (Table 3).

Table 2: Sociodemographic and obstetric characteristics of participants.

Patient No.	Age	Educational Background	Employment Status	Gravidity	Parity	The Number of Caesarean Section
P-1	29	Primary school	No	3	2	1
P-2	25	Secondary school	No	3	2	1
P-3	23	Secondary school	No	1	1	1
P-4	35	High school	No	3	3	3
P-5	23	High school	No	1	1	1
P-6	25	Secondary school	No	2	2	1
P-7	33	Primary school	Yes	2	2	2
P-8	25	Secondary school	No	3	1	1
P-9	39	High school	No	4	3	3
P-10	37	Primary school	No	3	3	3
P-11	34	Primary school	No	4	2	2
P-12	24	Literate	No	2	2	2
P-13	28	University	No	1	1	1
P-14	24	Secondary school	No	2	1	1
P-15	27	Secondary school	No	4	3	1
P-16	28	Primary school	No	4	4	1
P-17	31	High school	No	1	1	1
P-18	26	Literate	No	3	1	1
P-19	39	Literate	No	5	5	3
P-20	27	High school	No	4	2	2
p-21	28	High school	No	3	2	2
P-22	26	Literate	No	1	1	1
P-23	24	High school	No	1	1	1

Table 3: Main theme and sub-themes that emerged as a result of the thematic analysis.

Main Theme	Sub-Themes
Receiving Surgical Site Infection Treatment from the Participants' Perspective	Searching for Explanations: Uncertainty, Blame, and Distrust Pain, Uncertainty, and the Weight of Care Disrupted Roles and the Strain on Family Bonds Participants' Emotions Effects of the Treatment Process on Mental Health

3.1 Searching for Explanations: Uncertainty, Blame, and Distrust

In the present study, many participants stated that they did not receive sufficient information during the post-cesarean treatment and discharge process and that this was the reason for their SSI. Other factors that caused them to be diagnosed with SSI that participants stated are failure to care for themselves after cesarean surgery and a temperature environment. While some participants stated that they did not know what caused the SSI, some of them thought that it was because of the healthcare professionals' negligence. As can be seen from the participant statements below, factors such as poor communication and negligence, as well as the inability to obtain information from healthcare professionals, can cause confusion, distrust, self-blame, and vulnerability in participants.

> *"I think it occurred because of the doctor. He prescribed me medication but didn't say what to do after I am discharged from the hospital. He just said, "Take this (medication)". He didn't tell me whether or not I should take a bath. When I got home, my wound got really hard. I went back to the hospital on the ninth day after discharge: He asked me, "Did you take a bath? Why did it get like this?". The doctor didn't say whether or not I should take a bath. He said, "Do whatever you want to do…" They didn't give me any information about when to take a bath."* (P5).

> *"I have a two-and-a-half-year-old son. Did it happen because I stood on my feet a lot? I wonder if it is because of him (her son)? Because my son is a bit overweight and well-built. He constantly wants to be cuddled. Sometimes he jumps up and sits on my lap. He jumps on me. I don't know if this is why these wounds of mine have developed like this."* (P12).

> *"Our house was hot; there was no air conditioning. This (SSI) happened because of a lot of sweating."* (P16).

> *"It started when I was in the hospital, on the day of the surgery. I should have been getting better day by day, but it started getting worse. Then it got worse at home. There was a swelling there. Then it burst, and fluid and blood came out …For example, during the delivery, they could have taken better care of it. My doctor performed the surgery. After the baby was born, he asked someone else, who probably was an intern, to suture the wound. I wasn't happy at all. We were dissatisfied. I think it happened because of this."* (P20).

3.2 Pain, Uncertainty, and the Weight of Care

Many participants had negative experiences during the treatment process. Dressing changes were noted to be painful and uncomfortable, causing participants to lose their bodily autonomy. In addition to the long and painful treatment process, the inability to leave the hospital and stay with their spouses and children also caused participants psychological stress and reinforced feelings of being controlled.

> *"It's been very difficult, but the pain has gone away in the last four or five days. I'm very well now. I mean, nurses pressed on the wound, pressed that dressing on my surgical site. I suffered a lot…"* (P3).

> *"I don't even know how long it has been-over a month. The first stages of treatment were difficult. I had a really hard time at the begging. I kept thinking, 'Won't it end? That's enough.' I cried every day. I went through another suffering during the treatment, while dressing was changed (her voice was trembling)."* (P8).

While many participants stated that they were satisfied with the healthcare professionals during the treatment process, some of them stated that they were not satisfied with some healthcare professionals' attitudes during the treatment process.

> *"The nurses treated me really well. I didn't have any problems. I was very pleased."* (P1).

> *"I was never satisfied with one of the nurses. She crashed the dressing cart into my baby's stroller, which then crashed into the wall. She didn't react at all when I told her what she did. She wasn't careful when she was doing the dressing. She closed the wound as she opened it. I didn't like that nurse at all."* (P18).

Some participants noted the positive attitude of healthcare professionals, emphasizing that a negative attitude would have been worse. Another participant stated that in her first negative experience at the clinic, she was made to feel like a dirty person. This situation sill affected her, and she still felt judged because of the stains from the antiseptic solution used. Moreover, as can be seen from the statements below, the hospital's rules and some negative staff attitudes can cause women to experience tension between being a patient and a mother, and maternal processes such as caring for their babies are also negatively affected. These findings, revealing negative staff attitudes, made women feel ashamed and stigmatized, impacting their dignity and mental well-being.

> *"The nurses were very good, for example, they were all very attentive. They respond promptly when we call. They're cheerful when they come, not sullen. You're already uncomfortable, and if they were to act that way, it would be worse."* (P4).

> *"I changed the dressing pad at home and came back, but by the time I got to the hospital there was still some leakage and dirt. I felt like a slob. I tried to be the first one to be dressed (she pulled her legs up to her stomach to show how the wound gets dressed). That day, they scolded me. When they said, 'How can we do the dressing? You have to lie down because there are many other patients', I got really upset with them. If I were myself, I would have given an unkind answer but I didn't. Instead, I lay down. Then she said, 'Change that pad, change that dirty pas' as if I didn't already know I needed to change it. I would change it anyway. Yu don't like being treated as if you were a dirty person. Afterwards I started to worry that my underwear would always be stained because of the antiseptic solution. Now I think each nurse who comes will see the underwear is dirty and get angry. I have the perception that they will think I never change my underwear… they bring food. There is a hospital rule: You should have your breakfast at breakfast time. You can't eat that food; because the staff keep coming and going to pick up the dirty dishes. It gives you the impression that it's psychological pressure. In addition, if you're a patient with a child like me, it becomes more difficult. I think there are many patients with a child. The child is crying during that time. Both the companion and the patient may need to care for the child."* (P13).

Regarding obtaining information from healthcare professionals, the participants expressed uncertainty about the treatment process. One participant stated that they were unable to receive clear information from healthcare professionals, while another participant stated that receiving information from healthcare professionals positively affected their mental health. Not being able to obtain information from healthcare professionals can cause women not only uncertainty but also loss of trust and distress. In light of all these

findings, it was determined that the information provided by healthcare professionals had an impact on the participants' mental health.

> *"I couldn't get an answer to my question, "What caused the infection?". The doctor was on leave and didn't come. I think it was because of that. For example, should I take a shower during this period or not? I was told that I could take a shower two days after I was discharged. I asked whether the wound would be left open or closed. They said it would be left open, so I took my shower and continued to apply the antiseptic solution every day. Now my mother says that I shouldn't take a shower again; she says, 'You can't take a shower when the wound is open, because it takes a long time for the wound to heal.' When I come here, they ask me when I last took a shower, and I say, 'It's been ten days.' Then, they say I should take a shower urgently. For example, the last time I asked why it occurred (SSI). The nurse said, 'The reason is actually known, you haven't taken a shower for ten days, so it could be due to hygiene.' They cannot explain it clearly. Another nurse says 'Don't take a shower.' Another nurse says 'It could be due to hygiene.' Look, you took a shower, and it started to heal. This causes confusion. Healthcare workers contradict each other."* (P13).

> *"The nurse told me I wasn't the only patient—there are eight here. I stopped crying. I thought I was the only one with a SSI and felt scared and sad."* (P4).

3.3 Disrupted Roles and the Strain on Family Bonds

Participants stated that they experienced role changes due to being away from their homes, spouses, and other children. Participant accounts suggest that separation from children and reliance on others disrupted maternal identity, autonomy, and family roles (P11, P12, P15), revealing that tensions between women's caregiving responsibilities and the enforced dependency of hospitalization. Many participants felt supported by their family and relatives, but some participants stated that they had negative experiences due to a lack of support from their families. Supportive dynamics (P21) illustrate how family presence and practical help mitigated distress. These findings suggest that family relationships acted as both protective and risk factors in the recovery context.

> *"I also have a daughter at home. She misses me all the time."* (P11).

> *''I feel very bad. Whoever you ask will say the same thing. As I said, you are away from your home, away from your children, and away from your spouse, and your mind is always elsewhere. Even though I'm here, I am trying to manage other things, and after a while, you get bored with this situation. Additionally, I am a person who always completes my own work. I am not a person who depends on anyone. I gave birth. Two days later, I began working on my own tasks. Looking to someone for help and asking someone else to look over my child is very hard for me."* (P12).

> *"My family keeps saying the children never behave well. They keep calling me, so I feel a little bad. Also, my companion has been away for two days, and I'm staying here alone."* (P15).

> *"Everyone shows their interest and concern. My mother-in-law is with me; may God bless her. My husband comes over every day."* (P21).

3.4 Participants' Emotions

Many participants stated that they felt fear due to several factors. These included uncertainty about the treatment process and the time of dressing changes, inability to obtain information, receiving incorrect information from non-healthcare professionals, and disturbing sounds from other patients.

"I have a fear in me; will something happen to me? Will they reopen the surgical incision again? Will I have another surgery? So many bad things come to my mind…I hear what the patient receiving treatment in the room across from my room says; I get very scared when I hear that patient." (P7).

"I was afraid every day when it was time (for the change of dressing). Fear grips me. Would the doctor come or not? I was getting into that mood of wondering if she would come. I was in so much pain that I was surrounded by fear." (P8).

"For example, what is discomforting is that they come and tighten the stitches constantly, twice a day. Inevitably, I become anxious and scared."(P21).

"Some said 'You'll stay here for twenty days.' They also said 'Some women lost their lives.' I felt a lot of stress. I was scared." (P5).

Other negative emotions stated by the participants were depression (anxiety), sadness, and distress. Participants were found to be anxious due to the difficulties they experienced in changing dressings and caring for their newborn babies, distressed due to the long treatment process, and saddened by the negative attitudes of some healthcare professionals and their spouses' inability to accompany them due to hospital rules, being separated from their other children at home, and for one participant, could not touch their babies in intensive care. Furthermore, as can be seen in the statements given below, it was determined that the participants felt a sense of grief and loss due to being separated from their families, and frustration, disempowerment due to the long duration of treatment, hospital rules, and routines.

"My mother-in-law was sick. I wanted her to stay at home and my husband to come, but they did not let him stay. Of course, I was upset (her voice trembles), my mother-in-law had to come again." (P3).

"It has been twenty-five or twenty-six days since I gave birth, and I've been coming to the hospital almost every day since the day I gave birth. I'm always coming either for my son or for myself. I'm really tired of the hospital environment. I want to get away… " (P12).

"All I want is to cuddle my babies as soon as possible. I haven't been able to touch them at all. It's going to be a month, two days later. This is the only thing that makes me upset." (P11).

As for positive emotions, some participants felt relieved and safe as the treatment progressed. The positive feelings expressed by participants, including access to information, compassionate care, and early diagnosis, are also seen to reduce the distress experienced by individuals.

"Being here and being monitored makes me feel comfortable, I think positively…I feel safe here. I think I am lucky to come here, to be honest, because I noticed it (SSI) so early." (P10).

3.5 Effects of the Treatment Process on Mental Health

Participants stated that their mental health deteriorated, they experienced stress due to the negative experiences they encountered during the treatment process (pain, dressing changes, re-suturing, etc.), the breakdown of family patterns, the prolonged treatment process, and the resulting experiences of loneliness intertwined with all these factors. In addition to the negative experiences and feelings mentioned in previous findings, participants' inability to receive adequate psychological support was found to contribute to suicidal thoughts (P5). This finding also demonstrates the severe psychological impact of not receiving support during the treatment process on participants.

"I'm really stressed. If I didn't have a child, I would be so depressed as to think of committing suicide. Unfortunately, my husband can't stay here, which has made me feel lonely. Additionally, I have other

children at home that my mother should care for, which adds to my worries. Fourteen days seemed long to me and rather depressing; I'm getting overwhelmed. I realized that my baby is also getting overwhelmed inside." (P5).

"Two days ago, they stitched my wound again without any anesthesia. It was very bad, and as a result, I'm psychologically broken down here. Furthermore, my children are constantly crying (She spoke with a hoarse voice)." (P15).

One of the participants emphasized the fragility of the postpartum period, stating that they were postpartum, and mentioned that the treatment process had a negative impact not only on infant care but also on breastfeeding. Another participant stated that she could not go to her newborn babies, who were receiving treatment, and that she had concerns about breastfeeding. Furthermore, one of the participants stated that her milk supply decreased during the treatment process. Participants' statements indicate that the burden of physical treatment intersects with disruption in their experienced maternal roles. Within the scope of these findings, it was determined that the negative experiences women had during the treatment process negatively affected both their mental health and their motherhood processes, and that these two situations fed into each other.

"It's very difficult. I become very emotional. There's also something we call the postpartum period…I had a hard time, and it also made things difficult. I also had a hard time with my baby. For example, I have my antibiotic serum in my hand right now, she's crying, and I can't breastfeed. If my mother-in-law weren't with me, I wouldn't know what I could do with the baby." (P3).

"My babies are waiting for me in the incubator to breastfeed them. I worry about this. I can't go before I am discharged. They allow me to visit the babies three days a week, on Mondays, Wednesdays, and Fridays, at half past eleven, and provide information. For example, on the other days I can't go and see them…" (P11).

"I collapsed psychologically. For example, my milk supply decreased. It didn't come for a day or two when I was at home, but then it increased. I took medication, ate a lot, but now my milk supply is not enough, and I give formula to the baby. Staying in the hospital affected my psychology." (P14).

When examining the coping methods used by participants, some of them stated that they did nothing to cope. It has been determined that many participants used prayer, patience, self-talk, and a fatalistic approach as their method of coping with the difficulties they experienced during the treatment process.

"What did I do? I talked to myself and cried secretly. I wanted my mother to be here so much. I often asked God for patience. I told myself I would get better and return home to my daughter and son. Sometimes my morale was so low I wondered if I was going crazy, especially seeing fluid leak from the wound. Then I realized I had to be patient." (P7).

"I am grateful to God; I say prayers. That is how I think. When I see my friends and their different diseases, I thank God that mine is not so serious. Although it is a stitch infection, it will pass with God's permission, as the doctor said." (P21).

It has been observed that participants who used these methods either felt relieved by thinking about individuals in worse situations or that these methods remained ineffective coping strategies. In this context, one participant also stated that this method sometimes did not work, that their psychology sometimes deteriorated, and that she wanted her mother to be with her. The fact that participants used these methods even though they were ineffective suggests that individuals may have been influenced by their religious and sociocultural factors, as well as by a lack of support. This example highlights the importance of social

and emotional support. Furthermore, other coping methods that participants found to be more effective include seeking support from healthcare professionals, spouses, and families, complying with treatment, and having a positive perspective and self-motivation.

> *"Nurses who cared for me always gave me morale. Even if it was my most difficult treatment, even if it was a scary treatment, they gave me a lot of morale."* (P9).

> *"The friendliness of healthcare workers is important to me. Their sincerity is very important to me. This is also very good for patients' psychology. They feel better. Personally, I feel like that. If it weren't for their support during this process, I wouldn't have felt as good as I said. They really treated me very well during this process. Thanks to them, I recovered."* (P1).

> *"By being patient and waiting, with the greatest support from my husband. Yes, my husband is my greatest supporter."* (P12).

4 Discussion

This study explored women's experiences of post-cesarean SSI, focusing on their emotional responses and the impact of the treatment process on their family patterns, motherhood processes, and mental health. In this context, as determined in the results of this study, the information provided by healthcare professionals is a crucial factor in protecting and improving the mental health of women after childbirth [23, 24]. In the present study, the reason why the first question asked at the beginning of this study was "what is SSI?" was to understand whether the participants had obtained sufficient information about their diagnosis, which was one of the points that stood out in the literature review, within the scope of not obtaining sufficient information. In this study, it was determined that no patients defined SSI or its factors, and that they did not receive sufficient information. As indicated in several studies, SSI after caesarean section can occur due to many factors [25,26]. In the present study, the factors stated by the participants leading to SSI were as follows: inability to take care of oneself after cesarean section, lack of information provided by healthcare professionals, and a temperature environment. As stated in the findings of the present study, in the care to be given to a woman after caesarean section, the woman and her family should be informed throughout the process, information about wound care should be provided during counseling to be given to women and their families upon discharge, and they should be monitored after discharge [27–29]. In the present study, it was determined that the participants could not obtain information from healthcare professionals similar to Djatmika et al.'s study (2024) [15], and received false information from non-healthcare professionals during the treatment process. Women's inability to obtain information or access accurate sources of information indicates that they are not included in care plans, leaving them passive in their treatment process, and their sense of control is weakened. This, as reflected in the study findings, leads to women feeling uncertain about the treatment process and negatively affects their mental health. Within the scope of the literature and study results, the necessity of conducting preventive studies and the importance of patient-centered treatment process and training provided by health workers in protecting and improving the mental health of postpartum women are evident.

Many treatments, such as dressing changes, are applied to individuals who develop SSI after cesarean section, and the long treatment period, such as these practices, also negatively affects individuals [12–14,30]. In several studies, it was found that participants experienced pain, suffering, and discomfort [8,13,15]. Similarly, in the present study, it was determined that the treatment process was painful and distressing, especially due to factors such as dressing changes, and the process of re-suturing the wound, and not being able to go out due to hospital rules, and the long duration of the process caused the treatment to be difficult. In the present study, it was determined that the majority of participants were satisfied with their healthcare

professionals. While factors such as careless dressing and limited meal times were noted, the most prominent factors contributing to participants' dissatisfaction with some healthcare professionals were not receiving information and negative attitudes, including judgmental, dismissive, and the use of non-therapeutic communication techniques. In their study (2024), Djatmika et al. determined that individuals had both positive and negative experiences with healthcare professionals, and that communication problems in particular caused them to lose control during the isolation and wound treatment process [15]. Healthcare professionals' negative attitudes undermine women's sense of trust and dignity and make them more vulnerable. This finding is particularly evident in the study, where some participants stated that they felt stigmatized or ignored. Furthermore, the determination that hospital rules negatively affect the motherhood process, such as forcing women to choose between caring for their baby and eating, emerges as another factor contributing to the vulnerability of women with SSI. The study results demonstrate the importance of healthcare professionals using therapeutic communication techniques, providing holistic, trust-based care to patients who develop SSI after a cesarean section, and relaxing hospital rules to support women's motherhood process.

In the present study, it was determined that the participants were away from their spouses, children at home, and newborn babies treated in the neonatal unit during the treatment process. Due to this situation, participants are experiencing disruptions in family patterns and role changes. It was determined that most participants' families were supportive during this process, but women experienced difficulties regardless of whether they had family support. Despite having family support, women experienced difficulties such as being dependent on others, trying to fulfill their roles from the hospital, carrying the emotional burden of negative attitudes from children at home, and, in those without family support, loneliness and the negative emotional effects of negative attitudes. It also shows that while the family support women receive can be protective, it can also cause individuals to become dependent on others, leading to their disempowerment, and that women are caught between being a patient and being a mother or wife during treatment processes. These findings indicate that women receive insufficient support, experience changes in their roles as mothers and wives, and lose their autonomy because they are forced to depend on others. In some studies, similar to the experiences of the participants in this study, it has been determined that factors such as women experiencing changes in their maternal roles, having to have their roles performed by others, being unable to leave the hospital, receiving unclear information, losing bodily autonomy, and being passive during the treatment process due to different treatment reasons are prominent factors in changes in maternal identity [31,32]. In the present study, it was determined that participants experienced sadness and anxiety due to being separated from their families, babies, and other children at home during the treatment process. Similarly, in two studies, it was determined that the participants experienced anxiety, stress, and felt guilty due to changes in the family roles and their not being able to provide adequate care to their other children [14,15]. In this context, healthcare professionals should include the family in the care plan, screen whether women are receiving adequate support, and provide support to those who are not receiving sufficient support.

As seen in the literature and study findings, receiving treatment for an SSI negatively impacts women's lives in many areas, and this negative impact can cause women to experience a variety of negative emotions. The review of the literature demonstrated that the participants felt shock, disgust, anger, disappointment, and sadness due to problems in their wounds in Djatmika et al.'s study [15], the participants likened their initial experience to horror stories and felt embarrassed because the wound discharge was excessive and caused a terrible odor in Tanner et al.'s study (2012) [14], and the participants felt insecure in Andersson et al.'s study (2010) [13]. In this study, very few participants reported feeling more relaxed as the treatment process progressed, and only one participant stated that she felt safe. The most prominent negative emotion

among participants was found to be fear. Fear was associated with the uncertainty of the treatment process, difficulty accessing accurate information from reliable sources, painful dressing changes, and exposure to negative factors such as hearing women with other patients screaming during dressing changes. When looking at the participants' fear factors, their feelings of uncertainty about the treatment process and the timing of dressing changes, which are a painful experience, indicate that they did not actively participate in the treatment process and lost their physical autonomy. This situation, combined with trust issues stemming from negative attitudes among healthcare professionals, and hearing about other patients' experiences, which can be a traumatizing factor, leaves participants feeling more vulnerable. Within the scope of the study findings, it is recommended that healthcare professionals increase the autonomy of individuals by involving them in the treatment process, providing information, establishing trust, and making clinical arrangements to prevent other patients from overhearing the treatment process.

Within the scope of the literature and study results, experiencing negative emotions and experiences, remaining passive, losing autonomy, being vulnerable, and undergoing identity changes negatively affect the mental health of individuals with SSI. This study also supports these findings, determining that participants experienced stress and impaired mental health due to these negative factors and their intertwined experiences of loneliness. Similarly, in previous studies, individuals treated for SSI experienced isolation [13], and were negatively affected psychologically [14]. The fact that one participant in the study reported suicidal thoughts demonstrates the significant negative impact that treatment for a physical diagnosis such as SSI has on participants' mental health. Studies have also determined that negative factors such as depression, anxiety, stress, lack of social support, and negative life experiences play a role in women having suicidal thoughts during the postpartum period [33–35]. This study demonstrates that many of the factors cited in the literature determine participants' experiences, highlighting the importance of integrating mental health protection and enhancement practices into the clinics where they receive treatment. In this context, clinical nurses should provide holistic care, consultation-liaison psychiatric (CLP) nurses should conduct maternal mental health screening in these clinics, work in collaboration with clinical nurses, and ensure that individuals receive mental health support.

Another important finding in this study regarding participants' mental health is that not only their mental health but also their motherhood processes are negatively affected, and these two conditions feed into each other. This study determined that participants' mental health was negatively affected due to the difficulties they experienced in caring for their babies, including difficulties in breastfeeding, and even the reduction in their milk supply or the inability to breastfeed due to the treatment process. This finding also demonstrates how much SSI, which are physical diagnoses, can affect women and their babies. Similarly, in Childs et al.'s study (2020), one participant with SSI, milk supply decreased while she was administered antibiotics, which caused negativities in her breastfeeding process, and she felt bad and experienced disappointment due to switching to formula earlier than desired [8]. In a systematic review conducted by Yuen et al. (2022), it was determined that experiencing breastfeeding problems negatively affects mothers' mental health [36]. In the systematic review by Pezley et al. (2022), it was determined that interventions such as breastfeeding and infant care education, motivational interviewing, and psychoeducation had positive effects on both breastfeeding and maternal mental health [37]. In this context, it may be recommended that clinical nurses provide support related to the motherhood process in the care they give to women, organize treatment processes according to individuals' breastfeeding processes and support breastfeeding through education. Clinical nurses should provide women with trauma-informed perinatal care, as with other findings, it may be recommended that they work in collaboration with CLP nurses experienced in practices such as motivational interviewing and psychoeducation to protect individuals' mental health.

In the present study, it was found that four participants did not use any copin methods, while the majority used methods such as praying, being patient, talking to themselves, and adopting a fatalistic approach. It is thought that sociocultural and religious factors may influence the coping methods preferred by participants. Although participants indicated that these methods were not fully effective, their continued use is thought to stem from a lack of support from social, emotional, and healthcare professionals. This situation also shows that women are forced to resort to ineffective coping methods such as praying, being patient, and a fatalistic approach due to gaps in the healthcare system and lack of psychosocial support. Within this scope, a participant's statement that these methods did not work and that she wanted her mother to be present also supports this idea. Additionally, the inclusion of healthcare workers, family, and spouse support in other coping methods used by participants and found to be more effective is another factor supporting this idea. Other coping methods used by participants include adhering to treatment, maintaining a positive perspective, and self-motivation. In Djatmika et al.'s study (2024), the participants tried to obtain information in order to gain control during the treatment process [15]; however, to our knowledge, no studies have been conducted on the coping methods of individuals treated with a diagnosis of SSI after cesarean section. Therefore, this finding is expected to contribute to the literature and has revealed the need for future research in this area. Based on the determination that the majority of participants employed coping methods such as prayer and a fatalistic approach, depending on sociocultural and religious factors, it is recommended that healthcare professionals incorporate culturally sensitive nursing practices into the care they provide. Based on the findings that participants continue to use ineffective coping methods, it is recommended that healthcare professionals examine individuals' support systems. Finally, based on the findings that healthcare professionals' support is effective, it is recommended that healthcare professionals provide psychosocial support and training, such as stress management, to individuals with SSI after a cesarean section.

Limitations

The present study had several limitations. Firstly, the study data were collected during a time when the region was hit by two devastating earthquakes. This may have affected the frequency of hospital visits among participants, or even caused some participants not to present at all. Secondly, the study's inclusion criteria and single-center nature limit the generalizability of the results. This means that the findings cannot be applied to individuals with SSI from other types of surgeries or those who had a cesarean section, included in the exclusion criteria. Therefore, future studies should be conducted using multi-centered and broader inclusion criteria (such as those who cannot read or write Turkish, which was included in this study's exclusion criteria). Thirdly, recording two interviews in writing may have limited the richness of the data. Fourthly, the fact that one of the researchers worked as a supervisor nurse in the hospital where the data were collected may have influenced the participants' answers to some questions (their opinions about healthcare professionals, etc.). Finally, broad interview questions may have limited the depth of insight generated. This method may not have allowed for a thorough exploration of specific topics or themes. Future studies should purposively include more diverse populations, employ more probing interview guides, and explicitly incorporate reflexivity to deepen analytic rigour.

5 Conclusion and Future Research

In the present study, it was observed that the participants who had post-cesarean SSI faced numerous difficulties and experienced negative emotions during their treatment process. One of the biggest challenges identified by the women in this study was the difficulty of caring for their newborns and the negative impact it had on their ability to breastfeed. Moreover, this study shows that women's motherhood processes

are also negatively affected due to problems experienced in factors that directly affect the motherhood process, such as breastfeeding. This was found to have a negative effect on their mental health, and it was also noted that mental health, the motherhood process, and breastfeeding were interconnected factors. Additionally, the lack of support from spouses and family due to hospital conditions and the length of treatment, as well as being separated from other children at home, contributed to feelings of loneliness among the women. In addition to their experiences of loneliness, another important finding is that women use ineffective coping methods due to the inadequacy of their support systems. This also demonstrates that healthcare professionals are unable to provide adequate support to women with post-cesarean SSI. This situation isolates women and leads them to resort to coping methods they already know based on their sociocultural and religious background. All of these factors had a negative impact on the mental health of women with SSI after a cesarean section, which even led to suicidal thoughts. To protect and improve the mental health of women after childbirth, it is crucial to provide holistic care starting from the postpartum period. Therefore, it is recommended that women receive education during the postpartum treatment process, and upon discharge, their discharge planning should include consistent, clear, and culturally sensitive wound care education, and that they be followed up as a preventive measure. Women who develop SSI after a cesarean section should also receive education during their treatment process, and their care plans should take into consideration psychosocial factors. It is important to remember that these individuals are also postpartum and should be supported in caring for their babies, particularly regarding breastfeeding. Clinical nurses should provide support for baby care and breastfeeding, such as providing education to women, strengthening support systems, and planning treatment plans for the process of women caring for their babies. Furthermore, CLP nurses should actively participate in the clinics where these individuals are treated and collaborate with the clinic nurses to provide holistic care for those with SSI after a cesarean section. This is another crucial factor in protecting their mental health, as maternal mental health screening can be done in these clinics. As seen in the study findings, individuals tend to use culturally based coping strategies; however, these methods may not always be effective. Therefore, clinical nurses should provide culturally responsive care and can work with CLP nurses to help women use more effective coping methods. Finally, considering the findings from this study, it is recommended that randomized controlled trials be conducted to measure the effectiveness of evidence-based practices such as interventions to support breastfeeding, culturally grounded psychosocial strategies, and to integrate the results into clinical care.

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Availability of Data and Materials: Due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data is not available.

Ethics Approval: Before the study was conducted, ethics committee approval (decision date: 24 June 2022, decision number: 122) from Toros University Scientific Research and Publication Ethics Committee, and institutional permission from the hospital where the study was to be conducted were obtained.

Informed Consent: Before the interviews were started, the participants were informed about the scope of the study and data confidentiality in detail and they were told that the interviews would be audio recorded. Then their written consent was obtained.

Conflicts of Interest: The authors declare no conflicts of interest to report regarding the present study.

References

1. Gibbons L, Belizán JM, Lauer JA, Betrán AP, Merialdi M, Althabe F. The global numbers and costs of additionally needed and unnecessary caesarean sections performed per year: overuse as a barrier to universal coverage. World Health Rep. 2010;30(1):1–31.
2. World Health Organization. Caesarean Section Rates Continue to Rise Amid Growing Inequalities in Access [Internet]. Geneva, Switzerland: World Health Organization; 2021 [cited 2025 Sep 5]. Available from: https://www.who.int/News/Item/16-06-2021-Caesarean-Section-Rates-Continue-To-Rise-Amid-Growing-Inequalities-In-Access.
3. Özkan H, Özer BU, Arı Ö. Sezaryen ile doğuma güncel bir bakış: modern sezaryen teorisi. Arşiv Kaynak Tarama Derg. 2021;30(4):226–35. (In Turkish). [CrossRef].
4. Rich C, Skuthan A. Occupational therapists' role in maternal health in the home environment after cesarean section. Am J Occup Ther. 2025;79(1):1–6. [CrossRef].
5. Saeed KBM, Greene RA, Corcoran P, O'Neill SM. Incidence of surgical site infection following caesarean section: a systematic review and meta-analysis protocol. BMJ Open. 2017;7(1):e013037. [CrossRef].
6. Zuarez-Easton S, Zafran N, Garmi G, Salim R. Postcesarean wound infection: prevalence, impact, prevention, and management challenges. Int J Women's Health. 2017;9:81–8. [CrossRef].
7. Al Jama FE. Risk factors for wound infection after lower segment cesarean section. Qatar Med J. 2013;2012(2):9. [CrossRef].
8. Childs C, Sandy-Hodgetts K, Broad C, Cooper R, Manresa M, Verdú-Soriano J. Birth-related wounds: risk, prevention and management of complications after vaginal and caesarean section birth. J Wound Care. 2020;29(Sup11a):S1–48. [CrossRef].
9. Yokote N. Women's experiences of labor, surgery and first postnatal week by an emergency cesarean section. J Jpn Acad Midwif. 2008;22(1):37–48. [CrossRef].
10. Ma L, Chong MC, Lee WL, Yang H, Lian Y. The traumatic childbirth experience of mothers after emergency cesarean section (EmCS) in China: a descriptive qualitative study. BMC Pregnancy Childbirth. 2025;25(1):209. [CrossRef].
11. Benton M, Salter A, Tape N, Wilkinson C, Turnbull D. Women's psychosocial outcomes following an emergency caesarean section: a systematic literature review. BMC Pregnancy Childbirth. 2019;19(1):535. [CrossRef].
12. Salim R, Braverman M, Teitler N, Berkovic I, Suliman A, Shalev E. Risk factors for infection following cesarean delivery: an interventional study. J Matern Fetal Neonatal Med. 2012;25(12):2708–12. [CrossRef].
13. Andersson AE, Bergh I, Karlsson J, Nilsson K. Patients' experiences of acquiring a deep surgical site infection: an interview study. Am J Infect Control. 2010;38(9):711–7. [CrossRef].
14. Tanner J, Padley W, Davey S, Murphy K, Brown B. Patients' experiences of surgical site infection. J Infect Prev. 2012;13(5):164–8. [CrossRef].
15. Djatmika C, Lusher J, Williamson H, Harcourt D. 'Plan Z and then off the edge of a cliff': an interpretative phenomenological analysis of mothers' experience of living with a slow-to-heal Caesarean wound. Midwifery. 2024;137:104104. [CrossRef].
16. Yıldırım A, Şimşek H. Qualitative research methods in social sciences. Ankara, Türkiye: Seçkin Yayıncılık; 2016.
17. Sandelowski M. Whatever happened to qualitative description? Res Nurs Health. 2000;23(4):334–40. [CrossRef].
18. Hennink M, Kaiser BN. Sample sizes for saturation in qualitative research: a systematic review of empirical tests. Soc Sci Med. 2022;292:114523. [CrossRef].
19. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care. 2007;19(6):349–57. [CrossRef].
20. Braun V, Clarke V. Conceptual and design thinking for thematic analysis. Qual Psychol. 2022;9(1):3–26. [CrossRef].
21. Lincoln YS, Guba EG. Naturalistic inquiry. Beverly Hills, CA, USA: Sage; 1985. [CrossRef].

22. Kümbetoğlu B. Qualitative method and research in sociology and anthropology. İstanbul, Türkiye: Bağlam Yayıncılık; 2005.
23. Guerra-Reyes L, Christie VM, Prabhakar A, Siek KA. Mind the gap: assessing the disconnect between postpartum health information desired and health information received. Women's Health Issues. 2017;27(2):167–73. [CrossRef].
24. Youash S, Campbell MK, Avison W, Penava D, Sharma V, Xie B. Influence of health information levels on postpartum depression. Arch Women's Ment Health. 2013;16(6):489–98. [CrossRef].
25. Jasim HH, Sulaiman SAS, Khan AH, Dawood OT, Abdulameer AH, Usha R. Incidence and risk factors of surgical site infection among patients undergoing cesarean section. Clin Med Insights Ther. 2017;9:1–7. [CrossRef].
26. Peter EG, Ali Seif S. The influence of home environment and wound care practice on surgical site infection among post cesarean section women in Dodoma-Tanzania. Int J Afr Nurs Sci. 2022;17:100474. [CrossRef].
27. Ceylan G, Apay SE. Sezaryende pre, peri ve post-op ebelik bakımı. Artuklu Int J Health Sci. 2023;3(2):246–52. (In Turkish). [CrossRef].
28. Novelia S, Sae Sia W, Songwathana P. Surgical site infection among women post cesarean section: an integrative review. Nurs Med J Nursing. 2017;7(1):46. [CrossRef].
29. Mdoe MB, Mselle LT, Kibusi SM. Exploring content of home-based care education after caesarean section provided by Nurse Midwives in Maternity Units. Int J Afr Nurs Sci. 2024;20:100655. [CrossRef].
30. Kawakita T, Landy HJ. Surgical site infections after cesarean delivery: epidemiology, prevention and treatment. Matern Health Neonatol Perinatol. 2017;3:12. [CrossRef].
31. Markovic M, Manderson L, Schaper H, Brennecke S. Maternal identity change as a consequence of antenatal hospitalization. Health Care Women Int. 2006;27(9):762–76. [CrossRef].
32. Kuswanto CN, Stafford L, Sharp J, Schofield P. Psychological distress, role, and identity changes in mothers following a diagnosis of cancer: a systematic review. Psycho Oncol. 2018;27(12):2700–8. [CrossRef].
33. Yetwale A, Mulugeta C, Biyazin T, Fenta B, Alamrew A, Emagneneh T. Suicidal ideation and its associated factors among pregnant and post-partum women in Ethiopia, a systematic review and meta-analysis, 2025. BMC Psychiatry. 2025;25(1):616. [CrossRef].
34. Bodnar-Deren S, Klipstein K, Fersh M, Shemesh E, Howell EA. Suicidal ideation during the postpartum period. J Women's Health. 2016;25(12):1219–24. [CrossRef].
35. Reid HE, Pratt D, Edge D, Wittkowski A. Maternal suicide ideation and behaviour during pregnancy and the first postpartum year: a systematic review of psychological and psychosocial risk factors. Front Psychiatry. 2022;13:765118. [CrossRef].
36. Yuen M, Hall OJ, Masters GA, Nephew BC, Carr C, Leung K, et al. The effects of breastfeeding on maternal mental health: a systematic review. J Women's Health. 2022;31(6):787–807. [CrossRef].
37. Pezley L, Cares K, Duffecy J, Koenig MD, Maki P, Odoms-Young A, et al. Efficacy of behavioral interventions to improve maternal mental health and breastfeeding outcomes: a systematic review. Int Breastfeed J. 2022;17(1):67. [CrossRef].