

The Experience of Healthcare Professionals Providing Mental Health Services to Mothers with Postpartum Depression

A qualitative study

Nazanin Jannati,¹ Jamileh Farokhzadian,² *Leila Ahmadian³

ABSTRACT: Objectives: This study aimed to describe the experience of healthcare professionals in providing mental health services to women with postpartum depression (PPD). **Methods:** In this qualitative study, data were collected through semi-structured interviews with five physicians, five midwives and five psychologists from 14 urban healthcare centres in Kerman, Iran, from April 2019 to September 2019. Purposeful sampling was used to select the participants. Data were qualitatively analysed using a content analysis approach. **Results:** Data analysis revealed the main theme of the study: 'the long way ahead for comprehensive, integrated and responsive mental health services'. This theme included four categories: 'postpartum depression challenges', 'social and personal factors', 'structural challenges' and 'need for change in mental health services'. The participants described that depression diagnosis is difficult due to insufficient knowledge among healthcare providers and the hidden signs of PPD. They also described how different factors such as economic and cultural factors, personality traits, a community's lack of knowledge, negative attitude towards depression and limited family support might cause depression. Moreover, providing mental health services involves certain challenges, such as limited human resources, insufficient financial resources and incomplete or inefficient policy-making. **Conclusion:** Although measures have been taken to provide mental health services, there are many challenges regarding providing mental health services to mothers. Therefore, serious measures should be taken to improve mental health services and re-define the existing measures. Informing the community, empowering the healthcare providers and attempting to change the community's attitudes and beliefs can affect the mental healthcare of women with depression.

Keywords: Postpartum Depression; Mental Health Services; Community Mental Health Services; Mental Disorders; Depressive Disorder; Iran.

ADVANCES IN KNOWLEDGE

- Family-related factors can play an essential role in ensuring access to mental health services. Patients and families with financial issues and a lack of awareness about mental health services cannot properly benefit from these services. Therefore, policy-makers are advised to consider facilitators and barriers while creating mental health service programmes.
- There is a need to take steps to overcome the barriers to accessing mental health services. Future mental health programmes should increase the health system's capacity in terms of both trained healthcare workers and facilities.

APPLICATIONS TO PATIENT CARE

- Changing the community's beliefs and attitudes towards postpartum depression (PPD) could help in delivering effective care to mothers with depression.
- Identifying the challenges of and barriers to providing mental healthcare services to mothers with PPD can lead to the designing and implementation of better treatment and management services by policy-makers.

POSTPARTUM DEPRESSION (PPD) IS A COMMON depressive disorder that negatively affects mothers, children and families.¹ The prevalence of this disorder following child birth among women is 19.8% in developing countries and is 25.3% in Iran.² The long-term health consequences of PPD are persistent depressive disorder (dysthymia), marital problems and conflicts, lower quality of the mother-child relationship and impacts on a child's cognitive and emotional development.³ More than 50% of women are exposed to one or more risk factors of PPD, but only 10–15% of them are considered clinically depressed.⁴ There is

evidence that even when PPD is diagnosed in mothers, appropriate treatment may not be provided.⁵

Considering the destructive and adverse effects of PPD on the infant and family life, its timely diagnosis and treatment during the first weeks after childbirth are essential.⁶ However, the challenge of providing effective mental health services to depressed mothers persists.

Some studies have examined healthcare providers' experiences with providing mental health services to mothers with PPD. For example, in a qualitative study in Brazil, Santos Junior *et al.* explored healthcare providers'

³Neuroscience Research Center, Institute of Neuropharmacology, ¹Kerman University of Medical Sciences, Kerman, Iran; ²Nursing Research Center, School of Nursing and Midwifery, Kerman University of Medical Sciences, Kerman, Iran

*Corresponding Author's e-mails: ahmadianle@yahoo.com and lahmadian@kmu.ac.ir

Table 1: Socio-demographic characteristics of 15 healthcare providers from 14 urban healthcare centres in Kerman, Iran

Participant code	Age	Gender	Job	Work experience in years
P1	32	Female	Psychologist	8
P2	35	Male	Physician	10
P3	38	Female	Physician	12
P4	32	Male	Psychologist	8
P5	29	Female	Midwife	5
P6	29	Male	Psychologist	8
P7	42	Female	Midwife	24
P8	39	Female	Psychologist	12
P9	36	Female	Midwife	12
P10	40	Male	Physician	14
P11	28	Male	Psychologist	12
P12	46	Female	Physician	18
P13	42	Male	Midwife	10
P14	36	Male	Midwife	8
P15	32	Male	Physician	6

experiences of offering services to mothers with PPD. Their results showed that healthcare providers had limited time to provide services and had limited access to the diagnostic techniques for identifying women at risk of developing PPD.⁷ Rush explored nurses' experiences of helping depressed mothers in Australia.⁸ The results of the study showed that nurses need considerable training to detect depression symptoms and decide on the appropriate treatment methods. Bell *et al.* also identified barriers and facilitators of PPD services in Canada.⁹ In their study, barriers and facilitators were divided into five categories: accessibility and proximity, appropriateness and fit, stigma, encouragement to seek help and personal characteristics. Moreover, a study by Higgins *et al.* showed that maternity care units are fragmented and do not have a mental health specialist.¹⁰ In a study by Jomeen *et al.*, the results showed uncertainty in both managing women with psychological health problems and appropriate care access; it was found that consistent referral pathways are required to ensure the successful measurement of women's psychological well-being.¹¹ A study by Bina *et al.* showed that preparation, behaviours, awareness and perceived expertise are significant factors that contribute to the perceived readiness to perform PPD screening initiatives.⁵ In another study, Skoog *et al.* showed that

a credible psychological interview is required when asking about their moods in some groups of mothers.¹²

The aforementioned studies were conducted in developed countries to explore healthcare providers' experiences of providing mental health services to depressed individuals. To the best of the authors' knowledge, no study has explored the experience of healthcare professionals with mental health services in developing countries such as Iran. Therefore, to address this gap in the existing literature, the present study aimed to describe primary healthcare professionals' experience of providing mental health services to women with PPD.

Methods

This qualitative study was conducted using a content analysis approach. To apply this approach, a systematic and rule-guided classification method was used. The content analysis approach guides researchers to the most appropriate classes or themes and helps to describe text materials while considering words, phrases, latent contents and contexts.¹³

This study was conducted from April to September 2019 at 14 urban healthcare centres in Kerman, Iran. Kerman is classified as one of the metropolises of Iran due to its urban size and population. According to the 2016 census, the city's population was 3,164,718.¹⁴ There are 14 healthcare centres in different parts of the city, which differ in terms of socio-economic conditions. Therefore, the study sample was recruited from all of these centres for maximum diversity. In these healthcare centres, mental health services were introduced as a part of primary care in 1989. In some healthcare centres, a licensed psychologist is present to provide specialist mental healthcare. In centres with no psychologists available, mental health services are offered by a professionally qualified midwife.

This study used a purposeful sampling method and sampling continued until data saturation. Data collection was stopped when no new information or themes emerged or were observed from the data and further data collection became redundant. Purposeful sampling requires choosing the rich and diverse experience of healthcare providers.¹⁵ In each centre, a few eligible participants were selected by the first researcher. Healthcare providers who worked in healthcare centres were invited. This invitation letter included the aim of the study and the inclusion criteria. Inclusion criteria was defined as follows: (1) working on a family health team; (2) having more than five years of experience in providing care to mothers and pregnant women; and (3) having an education

Table 2: Categories and subcategories obtained through content analysis related to 15 healthcare providers' experience of delivering services to mothers with postpartum depression in Kerman, Iran

Main theme	Categories	Subcategories	Open code
The long way ahead for comprehensive, integrated and responsive mental health services	Postpartum depression challenges	<ul style="list-style-type: none"> • The difficulty of diagnosing PPD • PPD consequences 	<ul style="list-style-type: none"> • Unavailability of a test for depression • Different depressive symptom patterns • The effect of maternal depression on the baby
	Social, family and personal factors	<ul style="list-style-type: none"> • Limited family support • Economic and cultural factors • Personality traits • Lack of awareness and negative attitude of the community towards depression 	<ul style="list-style-type: none"> • Infidelity in marriage • Financial problems and poverty • Personality differences between mothers • Social stigma
	Structural challenges	<ul style="list-style-type: none"> • Barriers faced by mental health professionals • Economic barriers to mental health services • The unfavourable physical environment of health centres • Incomplete or inefficient policy-making 	<ul style="list-style-type: none"> • Lack of human resources • Lack of sufficient skills of mental health professionals • No separate room • Crowded healthcare centres • Lack of follow-up due to a large number of patients • Not evaluating the ability and skill of mental health professionals
	Need for change in mental health services	<ul style="list-style-type: none"> • Promising steps in diagnosis and treatment • Informing the community and ensuring social contribution • Supporting mothers • Empowering healthcare providers • Changing the attitudes and beliefs of the community 	<ul style="list-style-type: none"> • Insurance support and coverage of mental health services • Informing people about PPD • Educating spouses about depression among women • Training mental health professionals on PPD • Cultural diversity and mental health • Fighting PPD and its stigma • Increasing access to mental health services

PPD = postpartum depression.

level equivalent to or higher than a bachelor's degree in midwifery, psychology or medicine.

For maximum variation, purposeful sampling was applied to gather rich and varied insights and experiences. Healthcare providers of different genders and ages from different positions and with varying years of work experience and degrees were recruited. The sample consisted of 15 healthcare providers (five physicians, five midwives and five psychologists). Participants had been working in healthcare centres for many years, usually in the diagnosis, prevention and treatment department.

Data were collected using face-to-face, semi-structured and in-depth interviews. The first researcher, with experience in qualitative research, conducted all the interviews in Persian which were then translated into English. The first researcher went to the healthcare centres to describe the study's aims, encourage healthcare providers to participate in the research and schedule an interview. Interviews with participants were held in their healthcare centres ensuring that the everyday routines of participants were not disturbed.

Topic-guided questions were formulated based on specific study goals in a research panel with faculty members of medical informatics and nursing departments with a background in community health nursing and experience in in-depth interviews for qualitative studies. A variety of trigger questions were originally planned and posed to create a comfortable environment and prompt answers from participants using the qualitative techniques.

At first, participants were asked to describe their experience of providing mental health services to mothers with PPD. Then, more questions were asked according to the interview question's guide. The questions were as follows: 'What are your experiences of making a depression diagnosis and offering screening services to mothers with PPD?'; 'Would you please describe your experiences regarding the treatment of mothers with PPD?'; 'What strategies do you use to identify mothers with PPD? How do healthcare providers assist these mothers?'; 'What barriers and challenges have you experienced during the provision of mental health services to mothers with PPD?'; 'What facilitators did you experience in

the provision of mental health services to mothers with PPD?'. Further questions were asked based on the information obtained from the participants.

The mean duration of the interviews was 60 minutes. All interviews took place in a quiet room at the participants' workplace in the healthcare centres. All the interviews were audio-recorded and then transcribed verbatim using Microsoft Word (Microsoft Corp., Redmond, Washington, USA).

Data were analysed using the conventional qualitative content analysis method proposed by Graneheim and Lundman.¹⁶ Iterations in the method consisted of several actions: initially, the first researcher transcribed all the interviews. The researchers then read the transcripts multiple times for a general interpretation of the content and initial coding was done individually. The text was broken into units of context which were then condensed. Each unit of meaning consisted of terms and sentences containing similarly related aspects. Then, the researcher abstracted and labelled the condensed meaning units through open codes. After that, categories and subcategories were created based on the similarity or difference of the codes. Finally, the researcher extracted the data concepts. Triangulation analysis was used to discuss the content of the categories. In case of disagreements, discussions were held and clarifications were offered to reach a consensus. Lincoln and Guba's criteria were used to determine the trustworthiness of the data, which included credibility, confirmability, dependability and transferability.¹⁷

First, audio recording and transcription were used to ensure the correct representation of the participants' views and improve the credibility of the findings.¹⁸ In-depth descriptions of existing healthcare practices were presented to allow readers to judge the relevance of the results to their settings, thereby enhancing transferability.¹⁹ An audit trail, including audio recordings, transcripts, interview guides, data analysis products and field notes, was used to ensure dependability and conformability.²⁰

Two researchers (JF, NJ) read the transcriptions several times for an overall understanding of the content and to determine meaning units, perform an initial coding and interpret the data independently.^{16,21} The two researchers manually merged codes, classified them based on their similarities and established subcategories and categories independently. Following this, they developed the coding scheme (code name, code definition, categories, subcategories, text examples and coding rules).^{16,21} In this process, the researchers met regularly to discuss agreements and discrepancies within assigned codes, categories and subcategories. Moreover, an external expert

in qualitative health research provided additional instruction, which led to further modifications.

Letters had been sent to the healthcare managers for ethical considerations and asking them for permission to interview the healthcare workers. Moreover, informed consent was obtained from each participant before initiating the study. This study has been approved by the ethics committee of Kerman University of Medical Sciences (IR.KMU.REC.1396.1548).

Results

The data analysis revealed the main theme of the study: the long way ahead for comprehensive, integrated and responsive mental health services. It was found that there are many challenges to providing comprehensive mental health services. As a result of these challenges, several things need to be addressed. The participants reported that it is also challenging to diagnose and treat PPD, resulting in PPD consequences. The results are explained in the following sections using direct quotations of the participants. The researchers identified one main theme, four categories and 15 subcategories of mental health services that healthcare providers are perceived to provide [Tables 1 and 2].

It was found that there are some challenges in diagnosing and treating PPD, including 'the difficulty of diagnosing PPD' and 'PPD consequences'.

The participants believed that it was difficult to diagnose a mother with PPD due to many reasons: considering PPD as a reasonable condition, insufficient knowledge of healthcare providers about PPD signs and hidden signs of PPD. According to participant 2, "some people do not consider depression to be a disease and think it is normal for a woman to have insomnia, changes in weight and appetite and have fatigue and not enjoy life after childbirth. Moreover, healthcare providers do not have sufficient knowledge of PPD. Therefore, it would be difficult for them to diagnose PPD".

It was observed that the lack of timely diagnosis and treatment of a woman with PPD had many negative consequences, such as low quality of life, weak maternal relationships, reduced infant growth and development, marital problems and even suicidal thoughts. According to participant 9, "women have problems in marital relationships. One of the mothers did not enjoy the relationship with her husband. She was depressed and had no sexual desire. Her husband was also dissatisfied. She even could not communicate with her family members".

The participants believed that many factors in society and family play an essential role in

PPD. Since PPD treatment and diagnosis are both demanding processes, attention to social and family factors to prevent depression should be prioritised as these factors are associated with an increased risk of PPD. Taking steps to strengthen the everyday living conditions before, during and after pregnancy provides incentives for enhancing the mental health of mothers and reducing the risk of mental health disorders associated with society, family and personal factors. This category includes four subcategories: limited family support, economic and cultural factors, personality traits, lack of awareness and negative attitude of the community towards depression.

It appeared that family and social support plays a vital role in causing depression. Family support can affect PPD. Certain factors such as a husband's addiction, betrayal, inattentiveness and lack of support were among the factors that were reported by the participants. Participant 7 mentioned that "a woman was depressed because of her inattentive husband. Her husband was going out with his friends and betrayed his wife".

According to participants' opinions, economic and cultural factors can lead to depression by creating nervous tensions. Economic factors such as poverty, unemployment and inappropriate nutrition and cultural factors such as the stigma of PPD are among the causes of PPD. "A woman suffered from PPD due to her husband's unemployment and lack of income. Because of financial problems and poverty, she could not prepare food and carry out necessary tests during pregnancy. Moreover, stigma about depressed mothers is a barrier to improving their mental health", said participant 11.

There was an association between the personality traits of mothers and depression. For example, mood states and personality traits, ability to adapt, ability to communicate and individual interest in recreation can affect a mother's susceptibility to depression. According to participant 14, "some mothers are unhappy. However, some mothers have a happy mood. Mother's personality plays a causal role in the start of the PPD".

The awareness and attitude of the community towards mental health disorders were found to be of particular importance. While diagnosing and treating depression in the community, healthcare providers face problems such as people's lack of awareness about depression, depression stigma, limited referral options for depression, considering depression a reasonable condition and side effects of antidepressants. Participant 12 mentioned, "in our society, people consider depression unpleasant and the depressed patient is labelled a manic person. In

some cases, depression is regarded as a temporary disease. These problems are due to the community's lack of awareness about PPD. A depressed mother did not use prescribed drugs since she was worried about the side effect of these drugs on her baby's health".

It is difficult to provide effective mental health services while many structural challenges exist. The healthcare system needs healthcare providers who are experts in mental health to diagnose and treat women with PPD. Moreover, providing financial support for depressed mothers, free mental health services and a suitable environment is essential for moving towards comprehensive, integrated and responsive mental healthcare services.

The participants believed that a lack of mental health professionals and insufficient knowledge of healthcare providers about PPD were among the many mental health service delivery challenges. According to participant 2, "there are 30 to 40 patients every day, but we have just [one] mental health expert. Moreover, we cannot follow-up with all the patients because of the few numbers of mental health experts. Some psychologists do not have enough knowledge, so proper mental health services are not provided", said participant 15.

It was observed that there were financial barriers to providing mental health services to the community. For example, insurance did not cover the cost of mental health services and mental health services are expensive. Therefore, paying for these services was not possible for some patients. According to participant 13, "all people do not have access to free and decent mental health services due to the high cost. Unfortunately, insurance agencies do not cover mental health services".

It was found that many patients with mental health disorders wanted to keep their problems a secret. Hence, there should be a physical location and a separate room for providing these patients with mental health services. "A calm, comfortable and private environment is essential for examining and treating women with PPD. Unfortunately, the necessary standards for having a confidential environment have not been met in some medical centres", said participant 8.

It was found that there were healthcare policy challenges to providing mental health services. These challenges include a lack of organisation, lack of integrated policies and instructions, lack of access to free mental health services and lack of assessment of healthcare providers' skills. According to participant 13, "since the distribution of human resources has not been done correctly among healthcare centres, mental health experts provide mental health services

once a week in each healthcare centre. Therefore, the proper division of mental health experts requires the implementation of efficient policies”.

The data showed that the efforts were not adequate for providing comprehensive, integrated and responsive mental health services, and therefore, mental health services need to change. Some subcategories under this category were identified as follows: ‘promising steps in diagnosis and treatment’; ‘informing the community and ensuring social contribution’; ‘supporting mothers’; ‘empowering the healthcare providers’; and ‘changing the attitude and belief of the community’.

Different services are provided by healthcare centres to diagnose PPD; however, these services are not free or available to everyone. These services included using different scales such as the Edinburgh Postnatal Depression Scale (EPDS) to diagnose depression, referring patients to a mental health professional for further examination, following-up with patients, arranging psychotherapy sessions and drug therapy. However, there is a need to provide more effective services. Participant 6 explained, “we use EPDS to diagnose women who suffer from PPD. Then, we hold psychotherapy sessions for women. If the problem is not solved, I will refer the woman to a psychologist in the hospital for further examination”.

It was found that it is essential to inform the community about depression. People have to consider PPD as a mental disorder as this awareness would be necessary for diagnosing and treating PPD. For example, educating husbands about PPD would lead to increased family awareness. Therefore, PPD can be diagnosed and treated in a timely manner. Participant 6 mentioned, “we teach husbands how to interact with their depressed spouses. We ask them to gain control over things and also to help their women stay in treatment”.

It was found that one of the most challenging aspects that healthcare providers face is that depressed patients do not receive enough support. Measures such as mothers’ breastfeeding, availability of follow-up health plans, increased access to healthcare centres, financial support of women and insurance coverage for mental health services can help women receive timely mental health services. According to participant 9, “one of the reasons for the absence of patients and the lack of motivation in depressed patients is the lack of financial support and insurance coverage for services. If insurance supports mothers to address their financial problems, mothers are motivated to apply for mental health services”.

It was found that one of the significant factors that can increase healthcare quality was the empowerment

of healthcare providers. There is a need for new training for healthcare providers to update their knowledge about the latest methods of diagnosing and treating PPD. According to participant 1, “mental health training can help healthcare providers to empower their skills, but more education is needed. Healthcare providers are also interested in such training to enhance their skills”.

It was found that the community’s belief and attitude towards depression have a significant impact on a patient’s disease acceptance and compliance with treatment. Therefore, public attitude towards depression, the stigma of depression and community culture need to be changed. “The negative beliefs of families affect mothers with PPD. People need to be educated to accept PPD and then ask for help. So, the public attitude needs to be changed”, said participant 2.

Discussion

A commonly occurring depressive disorder, PPD negatively affects a multitude of individuals including mothers, children and families.¹ The present study aimed to describe the experience of primary healthcare professionals experience of providing mental health services to women with PPD across 14 urban healthcare centres in Kerman, Iran. The results from the current study suggested that cases of PPD may not commonly be identified and diagnosed in healthcare centres. The participants in this study stated that insufficient knowledge of healthcare professionals affects the identification of symptoms of PPD and the lack of apparent symptoms makes the diagnosis of PPD difficult. This finding was consistent with that of Goldsmith, who found that nurses had difficulties screening for PPD.²² According to the results of the current study, PPD has detrimental effects on mothers and the quality of marital relationships. In agreement with these results, one study has confirmed that PPD is associated with maternal struggle and numerous negative consequences for offspring.²³

This study’s findings showed that limited family support, economic, cultural and religious events occurring in society and susceptible personality traits and characteristics can lead to PPD and this was consistent with other studies.^{24–26} Based on healthcare professionals’ experiences, limited family support was found to be one of the causes of PPD. As in the present study, a study by Matthey *et al.* showed that the partner’s lack of support was reported as being one of the leading causes of depression.²⁷ The lack of awareness of the public regarding PPD was found to be another cause of depression in the current study. As in the case of the present study’s findings,

Kingston *et al.* also showed that most women did not seek help for depression due to their insufficient knowledge.²⁸ Removing barriers relating to social, family and personal factors is one solution for the improvement of mothers' mental health. In addition, other challenges and barriers to mental health services need to be identified and addressed.

Participants of the current study described that mothers had a negative attitude towards antidepressants along with concerns about their side effects. Therefore, mothers did not take antidepressants and had low treatment compliance. In agreement with the present study's results, Hirst and Moutier's review also indicate mothers' hesitation to take antidepressants due to their concerns about the complications of these drugs for themselves and their newborns.²⁹ According to the present study's findings, it appears that mothers must accept depression as a curable illness to improve depression treatment. This result was in agreement with that reported by Feeley *et al.*, revealing that mothers who consider depression as a disease are more willing to use mental health services than those who consider it a common illness and a part of motherhood.³⁰

One of the strategies suggested in the present study was changing the community's attitude and belief towards PPD. In Bell's study, more than 37% of women diagnosed with depression refused treatment and did not accept their illness.⁹ According to the experience of healthcare professionals in this study, solving this problem requires cultural promotion and training surrounding mental health issues to better combat this condition. Moreover, in other studies, it has been shown that the provision of follow-ups and accessibility of healthcare centres are significant for increasing a patient's motivation to seek treatment for the disease.^{9,31}

The current study's findings demonstrated that there are structural challenges to providing mental health services. In line with the results of the present study, other studies have indicated that the lack of insurance coverage, budget issues and the lack of financial resources make patients unable to seek help, leading to many mental health problems.³² As in the present study, healthcare professionals' limitations in time and lack of sufficient environmental resources were mentioned as two main leading factors that lead to undiagnosed depression in Junior *et al.*'s study.⁷ The findings from the current study showed that the physical environment of the health centres should be designed to make patients with mental disorders feel comfortable. Another study also reported that the accessibility of health facilities and the availability of high-quality care, healthcare providers and equipment

in the health centre are factors that affect mental health services.³³

Based on the current results, incomplete or inefficient policy-making was found to be among the critical factors leading to a shortage of human resources in mental health services and a lack of follow-up care for patients suffering from PPD. In line with the present study's results, another study introduced the weakness of governmental structures as a leading cause of the inaccessibility of mental health facilities and services.⁷ These weaknesses included a lack of evidence-based guidelines for the care of women with postpartum mood disorders, failure of prioritising mental healthcare and the lack of coordination among different organisations as barriers to mental health service delivery. On the other hand, the healthcare providers' lack of training and the inaccurate evaluation of the patient's condition were reported as other essential factors. In line with the present study's finding, a study from Brazil mentioned that the lack of appropriate professional training for PPD was a problem mentioned by healthcare professionals.⁷ Additionally, the limited knowledge of healthcare professionals about prenatal mental health problems has contributed to a lack of diagnosis and treatment of perinatal mental health problems as identified in other studies.^{34,35} Therefore, the provision of mental health training for healthcare professionals should be prioritised.

The participants believed that it is essential to use reliable tools to diagnose depression. Other studies have also highlighted the importance of using valid screening tools in routine care.³⁷ Studies have also suggested that psychosocial interventions are required to prevent or alleviate the adverse consequences of antenatal depression.³⁸ The results of this study showed that the evaluation of mothers' mental health in the postpartum period was performed routinely using EPDS in healthcare centres. Besides EPDS, there are different scales for measuring depression in primary care, such as the Beck Depression Inventory Self-Reporting Questionnaire and the Patient Health Questionnaire.³⁹ However, the use of these scales is not common in health centres in Iran. Chew-Graham *et al.* revealed that the examination of depressive symptoms is not a part of the routine and mandatory care.⁴⁰ Each patient is not referred to a physician for the examination and diagnosis of depression which was in contrast to the findings from the present study. This difference could be because of clinicians' obligation to screen mothers after delivery following the implementation of the health reform plan in Iran. In this regard, healthcare professionals are obliged to provide mental health services.

If a mother's EPDS score indicates acute PPD, she is then referred to a psychologist for further examination. Consistent with the present study's findings, other studies have revealed that a person suffering from depression requires further examinations.²⁹ This is primarily because some mothers may not have answered certain questions accurately as a result of misunderstanding them and the EPDS is used only as part of an initial screening.⁴¹ Therefore, in such cases, the patient needs to go on to receive appropriate examination under a psychologist's expert supervision.

Finally, with regard to the diagnosis, treatment and prevention of depression, the participants in this study suggested that informing the community about PPD through mass media can help. They also suggested that it would be helpful to inform the patient's family about the presence of psychologists in health centres. One study examined the effects of the quality of relationships with family and friends on a person's well-being in adulthood.⁴² It was noted that adults with good relationships with their families were more likely to have positive friendships and higher self-esteem; they were also more likely to display fewer symptoms of depression than those with negative relationships. This study specifically explored the experience of healthcare professionals in their provision of mental health services to women; the relationship between PPD and women's social status in their life was not explored. Future studies can provide critical insight in this regard.

This study has two significant limitations. First, contact with the participants was limited after their preliminary interview. The participants were sent their transcripts and uniquely defined categories and they were encouraged to comment, correct perspectives and enhance accuracy. Only seven replies were received with minor contributions and corrections. Second, the study was conducted in one region. Due to regional variations in culture and traditions, similar studies are needed in other areas of the country, private sectors and even other countries in order to provide more generalisable results. Despite its limitations, this study offers valuable insights into the experience of healthcare professionals of providing mental health services to women with PPD in Iran. To the best of the authors' knowledge, these areas have not been explored elsewhere in the literature.

Conclusion

Despite the availability of mental health services, there are many problems with the provision of mental health services to depressed mothers. Efforts have already been made at the community level to provide mental

health services. Solving these problems requires the accurate identification of these problems, appropriate decision-making and further research. The results from this study can guide educators and experts in the provision of more effective mental health services to mothers.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

FUNDING

No funding was received for this study.

AUTHORS' CONTRIBUTION

NJ, LA and JF formed the concept and designed the study, acquired and interpreted the data and drafted the paper. JF arranged the logistics of the study. NJ and JF had the main responsibility for analysis of the data. All three authors read and approved the final version of the manuscript.

References

1. Sudhanthar S, Sheikh Z, Thakur K. Postpartum depression screening: are we doing a competent job? *BMJ Open Qual* 2019; 8:e000616. <https://doi.org/10.1136/bmjopen-2018-000616>.
2. Veisani Y, Delpisheh A, Sayehmiri K, Rezaeian S. Trends of postpartum depression in iran: a systematic review and meta-analysis. *Depress Res Treat* 2013; 2013:291029. <https://doi.org/10.1155/2013/291029>.
3. Paquin C, Côté SM, Tremblay RE, Séguin JR, Boivin M, Herba CM. Maternal depressive symptoms and children's cognitive development: Does early childcare and child's sex matter? *PLoS One* 2020; 15:e0227179. <https://doi.org/10.1371/journal.pone.0227179>.
4. E. BJ. Psychometric testing of immigrants and natives in an acute psychiatry facility. *Ment Illn* 2017; 9:48–51. <https://doi.org/10.1108/mi.2017.6987>.
5. Bina R, Glasser S, Honovich M, Levinson D, Ferber Y. Nurses perceived preparedness to screen, intervene, and refer women with suspected postpartum depression. *Midwifery* 2019; 76:132–41. <https://doi.org/10.1016/j.midw.2019.05.009>.
6. Yonkers KA, Ramin SM, Rush AJ, Navarrete CA, Carmody T, March D, et al. Onset and persistence of postpartum depression in an inner-city maternal health clinic system. *Am J Psychiatry* 2001; 158:1856–63. <https://doi.org/10.1176/appi.ajp.158.11.1856>.
7. Santos Junior HPO, Rosa Gualda DM, de Fatima Araujo Silveira M, Hall WA. Postpartum depression: The (in) experience of Brazilian primary healthcare professionals. *J Adv Nurs* 2013; 69:1248–58. <https://doi.org/10.1111/j.1365-2648.2012.06112.x>.
8. Rush P. The experience of maternal and child health nurses responding to women with postpartum depression. *Matern Child Health J* 2012; 16:322–7. <https://doi.org/10.1007/s10995-010-0688-2>.
9. Bell L, Feeley N, Hayton B, Zelkowitz P, Tait M, Desindes S. Barriers and Facilitators to the Use of Mental Health Services by Women With Elevated Symptoms of Depression and Their Partners. *Issues Ment Heal Nurs* 2016; 37:651–9. <https://doi.org/10.1080/01612840.2016.1180724>.
10. Higgins A, Tuohy T, Murphy R, Begley C. Mothers with mental health problems: Contrasting experiences of support within maternity services in the Republic of Ireland. *Midwifery* 2016; 36:28–34. <https://doi.org/10.1016/j.midw.2016.02.023>.

11. Jomeen J, Glover L, Jones C, Garg D, Marshall C. Assessing women's perinatal psychological health: exploring the experiences of health visitors. *J Reprod Infant Psychol* 2013; 31:479–89. <https://doi.org/10.1080/02646838.2013.835038>.
12. Skoog M, Berggren V, Hallström IK. 'Happy that someone cared'—Non-native-speaking immigrant mothers' experiences of participating in screening for postpartum depression in the Swedish child health services. *J Child Heal Care* 2018; 23:118–30. <https://doi.org/10.1177/1367493518778387>.
13. Sandelowski M. What's in a name? Qualitative description revisited. *Res Nurs Health*. 2010; 33:77–84. <https://doi.org/10.1002/nur.20362>.
14. Statistical Center of Iran. Population of Cities in Iran. 2016. From: <https://www.amar.org.ir/english> Accessed: Oct 2020.
15. Patton MQ. *Qualitative Evaluation and Research Methods*. 3rd ed. Newbury Park, CA, USA; 2002.
16. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today* 2004; 24:105–12. <https://doi.org/10.1016/j.nedt.2003.10.001>.
17. Lincoln YS, Guba EG. But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Dir Progr Eval* 1986; 1986:73–84. <https://doi.org/10.1002/ev.1427>.
18. 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 Heal Care* 2007; 19:349–57. <https://doi.org/10.1093/intqhc/mzm042>.
19. Manfred Stommel CW. *Clinical Research: Concepts and principles for advanced practice nurses*. USA: Lippincott Williams & Wilkins. 2004.
20. Haber DWGL-WJ. *Nursing and Midwifery Research: Methods and Appraisal for Evidence Based Practice*. Australia: Elsevier. 2012.
21. Long T, Johnson M. Rigour, reliability and validity in qualitative research. *Clin Eff Nurs* 2000; 4:30–7. <https://doi.org/10.1054/cein.2000.0106>.
22. Goldsmith ME. Postpartum depression screening by family nurse practitioners. *J Am Acad Nurse Pract* 2007; 19:321–7. <https://doi.org/10.1111/j.1745-7599.2007.00232.x>.
23. O'Hara MW, McCabe JE. Postpartum depression: current status and future directions. *Annu Rev Clin Psychol*. 2013;9:379–407. <https://doi.org/10.1146/annurev-clinpsy-050212-185612>.
24. Kim GE, Choi H-Y, Kim E-J. Impact of economic problems on depression in single mothers: A comparative study with married women. *PLoS One* 2018; 13:e0203004–e0203004. <https://doi.org/10.1371/journal.pone.0203004>.
25. Tucker JN, Grzywacz JG, Leng I, Clinch CR, Arcury TA. Return to work, economic hardship, and women's postpartum health. *Women Health* 2010; 50:618–38. <https://doi.org/10.1080/03630242.2010.522468>.
26. Eastwood JG, Phung H, Barnett B. Postnatal depression and socio-demographic risk: factors associated with Edinburgh Depression Scale scores in a metropolitan area of New South Wales, Australia. *Aust N Z J Psychiatry* 2011; 45:1040–6. <https://doi.org/10.3109/00048674.2011.619160>.
27. Matthey S, Barnett B, Ungerer J, Waters B. Paternal and maternal depressed mood during the transition to parenthood. *J Affect Disord* 2000; 60:75–85. [https://doi.org/10.1016/s0165-0327\(99\)00159-7](https://doi.org/10.1016/s0165-0327(99)00159-7).
28. Kingston DE, McDonald S, Austin M-P, Hegadoren K, Lasiuk G, Tough S. The public's views of mental health in pregnant and postpartum women: a population-based study. *BMC Pregnancy Childbirth* 2014; 14:84. <https://doi.org/10.1186/1471-2393-14-84>.
29. Hirst KP, Moutier CY. Postpartum major depression. *Am Fam Physician* 2010; 82:926–33.
30. Feeley N, Bell L, Hayton B, Zelkowitz P, Carrier M-E. Care for Postpartum Depression: What Do Women and Their Partners Prefer? *Perspect Psychiatr Care* 2016; 52:120–30. <https://doi.org/10.1111/ppc.12107>.
31. Horowitz JA, Murphy CA, Gregory KE, Wojcik J. Best practices: community-based postpartum depression screening: results from the CARE study. *Psychiatr Serv* 2009; 60:1432–4. <https://doi.org/10.1176/appi.ps.60.11.1432>.
32. Taghva A, Farsi Z, Javanmard Y, Atashi A, Hajebi A, Khademi M. Stigma Barriers of Mental Health in Iran: A Qualitative Study by Stakeholders of Mental Health. *Iran J Psychiatry* 2017; 12:163–71.
33. Devkota G, Basnet P, Thapa B, Subedi M. Factors affecting utilization of mental health services from Primary Health Care (PHC) facilities of western hilly district of Nepal. *PLoS One* 2021; 16:e0250694. <https://doi.org/10.1371/journal.pone.0250694>.
34. Megnin-Viggars O, Symington I, Howard LM, Pilling S. Experience of care for mental health problems in the antenatal or postnatal period for women in the UK: a systematic review and meta-synthesis of qualitative research. *Arch Womens Ment Health* 2015; 18:745–59. <https://doi.org/10.1007/s00737-015-0548-6>.
35. Dennis C-L, Chung-Lee L. Postpartum depression help-seeking barriers and maternal treatment preferences: a qualitative systematic review. *Birth* 2006; 33:323–31. <https://doi.org/10.1111/j.1523-536X.2006.00130.x>.
36. Teng L, Robertson Blackmore E, Stewart DE. Healthcare worker's perceptions of barriers to care by immigrant women with postpartum depression: an exploratory qualitative study. *Arch Womens Ment Health* 2007; 10:93–101. <https://doi.org/10.1007/s00737-007-0176-x>.
37. Georgiopoulos AM, Bryan TL, Wollan P, Yawn BP. Routine screening for postpartum depression. *J Fam Pract* 2001; 50:117–22.
38. Rwakarema M, Premji SS, Nyanza EC, Riziki P, Palacios-Derflinger L. Antenatal depression is associated with pregnancy-related anxiety, partner relations, and wealth in women in Northern Tanzania: a cross-sectional study. *BMC Womens Health* 2015; 15:68. <https://doi.org/10.1186/s12905-015-0225-y>.
39. Kerr LK, Kerr Jr LD. Screening tools for depression in primary care: the effects of culture, gender, and somatic symptoms on the detection of depression. *West J Med* 2001; 175:349–52. <https://doi.org/10.1136/ewjm.175.5.349>.
40. Chew-Graham CA, Sharp D, Chamberlain E, Folkes L, Turner KM. Disclosure of symptoms of postnatal depression, the perspectives of health professionals and women: a qualitative study. *BMC Fam Pract* 2009; 10:7. <https://doi.org/10.1186/1471-2296-10-7>.
41. DelRosario GA, Chang AC, Lee ED. Postpartum depression: symptoms, diagnosis, and treatment approaches. *JAAPA* 2013; 26:50–4. <https://doi.org/10.1097/01720610-201302000-00009>.
42. Fuller-Iglesias HR, Webster N, Antonucci TC. Adult family relationships in the context of friendship. *Res Hum Dev* 2013; <https://doi.org/10.1080/15427609.2013.786562>.