


Paternal Postnatal Depression During COVID-19 Pandemic: The Role of Health Care Providers

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Abstract

Background: The fast spread of COVID-19 can cause some psychological disorders for men. One of the psychological disorders is paternal postpartum depression (PPD). The aim of the present research was to review studies that have investigated paternal postpartum depression during the COVID-19 pandemic. **Materials and Methods:** For this narrative review, databases such as Google Scholar, Scientific Information Databases (SID), Magiran, PubMed, Web of Science, and Scopus were searched for the full texts of published studies in the Persian and English languages in the period of 2019 to 2021. Finally, 3 articles were selected and reviewed in this study. **Results:** The results of this review study were classified into 3 main categories such as (1) The psychological status of men during the COVID-19 pandemic, (2) The effect of paternal PPD on children's development and family psychological status during the COVID-19 pandemic, and (3) The role of healthcare providers in the management of paternal PPD. The findings of the studies showed that paternal PPD increases the rate of child maltreatment, maternal depression, and domestic violence. The promotion of the interpersonal skills of healthcare providers with fathers suffering from depression or psychological problems is the determinant factor of successful results. **Conclusions:** The results showed that paternal PPD has a wide range of consequences in this pandemic. Therefore, it would be recommended that healthcare staff have close contact with families and screen fathers for paternal PPD during the COVID-19 pandemic.

Keywords

COVID-19, postnatal depression, postpartum depression, paternal

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Introduction

The emergence and rapid spread of novel coronavirus (2019-nCoV) all over the world has resulted in psychological stress.^{1,2} Quarantine and physical distancing, as methods to prevent the spread of the COVID-19 disease, can cause uncertainty and confusion.³ Naturally, during pandemics, people feel stress and worry due to fear of illness or death, loss of job, economic instability, and social exclusion.⁴ On a large scale, this epidemic can potentially cause widespread fear, stress, anxiety, and psychological disorders.⁵

The COVID-19 pandemic has influenced many aspects of human life.⁶ When people face traumatic events beyond the usual human experience, they are at the risk of developing negative feelings and physiological hyperarousal.⁷ This is applicable when people are suffering from the emotional instability and vulnerability of pregnancy and childbirth. Having had a new baby, parents face new responsibilities

or changes in their roles, and they may experience conflicts and challenges. These conflicts can be heightened when combined with other predisposing factors such as mental

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disorders and depression.⁸ One of them is the postpartum period.⁹ Pregnancy and childbirth can cause a range of mood disorders such as stress, anxiety, and depression due to biological changes and alterations in parenting roles. During this period, the most common mood disorder is depression, which may last from 1 month to 1 year after childbirth.¹⁰

The literature review showed that many studies assessed the various aspects of postpartum depression (PPD) in mothers. However, research has rarely addressed the paternal PPD, specifically in developing countries.¹¹

Although World Health Organization has emphasized providing integrated maternal and child health services, however, new fathers' mental health has not been embedded in these programs yet.¹² There is increasing evidence indicating that fathers experience PPD in much the same way as mothers experience PPD.⁶ According to studies, the prevalence of paternal PPD during the first year after childbirth ranges between 4% and 25%.¹³ A study in Japan which investigated the paternal mental health during the transition to fatherhood period showed that fathers experienced PPD more than mothers did.¹⁴

Paternal PPD is recognized as a major clinical problem for families with symptoms similar to maternal PPD in that they are depressed or have a sad mood, have a significant decrease in interest in almost all activities, have a significant change in weight, have insomnia or hypersomnia, fatigue or loss of energy, psychomotor agitation, feelings of worthlessness or guilt, have decreased ability to think or concentrate, and have recurring thoughts about death.¹ Although there is an increase in the rate of PPD in fathers, neither in normal situations nor in crisis, however, fathers do not receive enough attention.^{10,13}

Paternal PPD is associated with perceived stress, so although having a new baby is considered as a desirable event, it can potentially cause stress.¹¹ This tension can be heightened by the stress from the current pandemic. Xiong et al⁷ conducted a study on maternal PPD in the COVID-19 pandemic and concluded that 30% of women experienced PPD. Concerns about COVID-19 and measures to prevent its spread, as well as a lack of social support, persistent fever, and immigrant status, were the most significant risk factors for PPD. So, it is possible that a significant percentage of men, while challenged with numerous stresses from the pandemic, also suffer from PPD.⁷

To our knowledge, there is no study addressing the impact of COVID-19 on PPD in new fathers. Due to some reasons, this group is more likely to develop psychological disorders than others.¹⁴ During this pandemic, men may experience distress related to movement restrictions, financial concerns, joblessness, etc.³ As the new child imposes more financial burden on families, joblessness, and mental stress during the pandemic can increase fathers' stress and deteriorate parents' and especially men's mental health.¹⁵ In many cultures, men are

considered the main breadwinners for their family, so the financial burden caused by the pandemic could lead to more suffering and worries for men.¹⁶ This study aimed to review the published studies regarding paternal PPD during the COVID-19 pandemic.

Materials and Methods

This review was based on 4 steps: Identification of the research question; data source and search strategy; study selection; and data extraction.

The research question was defined as what is the paternal PPD during the COVID-19 pandemic?

To find relevant articles, the researchers of this study independently searched the databases such as Google Scholar, Scientific Information Databases (SID), Magiran, PubMed, Web of Science, and Scopus with key words which were extracted through the MeSH strategy, such as ("paternal" OR "fathers" OR "parent") AND ("postpartum depression" OR "Postnatal Depression") AND ("COVID" OR "Coronavirus" OR "nCoV"). The search covered published articles in the period of 2019 to December 10, 2021.

In order to identify more relevant articles, the reference lists of the included studies were also searched manually. Two researchers (ZY and MV) conducted the title and abstract screening independently and selected the relevant articles according to the inclusion criteria such as being published in scientific and valid journals in the Persian or English language, referring to paternal PPD during the COVID-19 pandemic. About 32 English articles were identified through database search. After removing repeated articles (n=6), 26 articles remained. In the abstract screening stage, 13 articles were excluded due to not focusing on the study's research question. Also, in 13 full-text assessments, articles that did not refer to paternal PPD in the Covid-19 period (n=10), were excluded from this study. Finally, 3 articles were selected and reviewed (See Figure 1).

Finally, the full texts of the included articles were studied carefully, and the relevant data were extracted and used for writing the findings of this study.

Results

A total of 3 relevant articles that met the inclusion criteria were found.

Yu¹⁷ conducted a quantitative survey study in the United States. There were 292 fathers, with a range of 18 to 62 years. Paternal PPD is assessed with the Edinburgh Postnatal Depression Scale (EPDS). Paternal PPD reported 71.71%. Most of the participants thought that the COVID-19 pandemic negatively influenced their financial ability, ability to seek help, social life, and mental health. However, 52.19% of them believed that COVID-19 positively impacted their experience of being a father.¹⁷

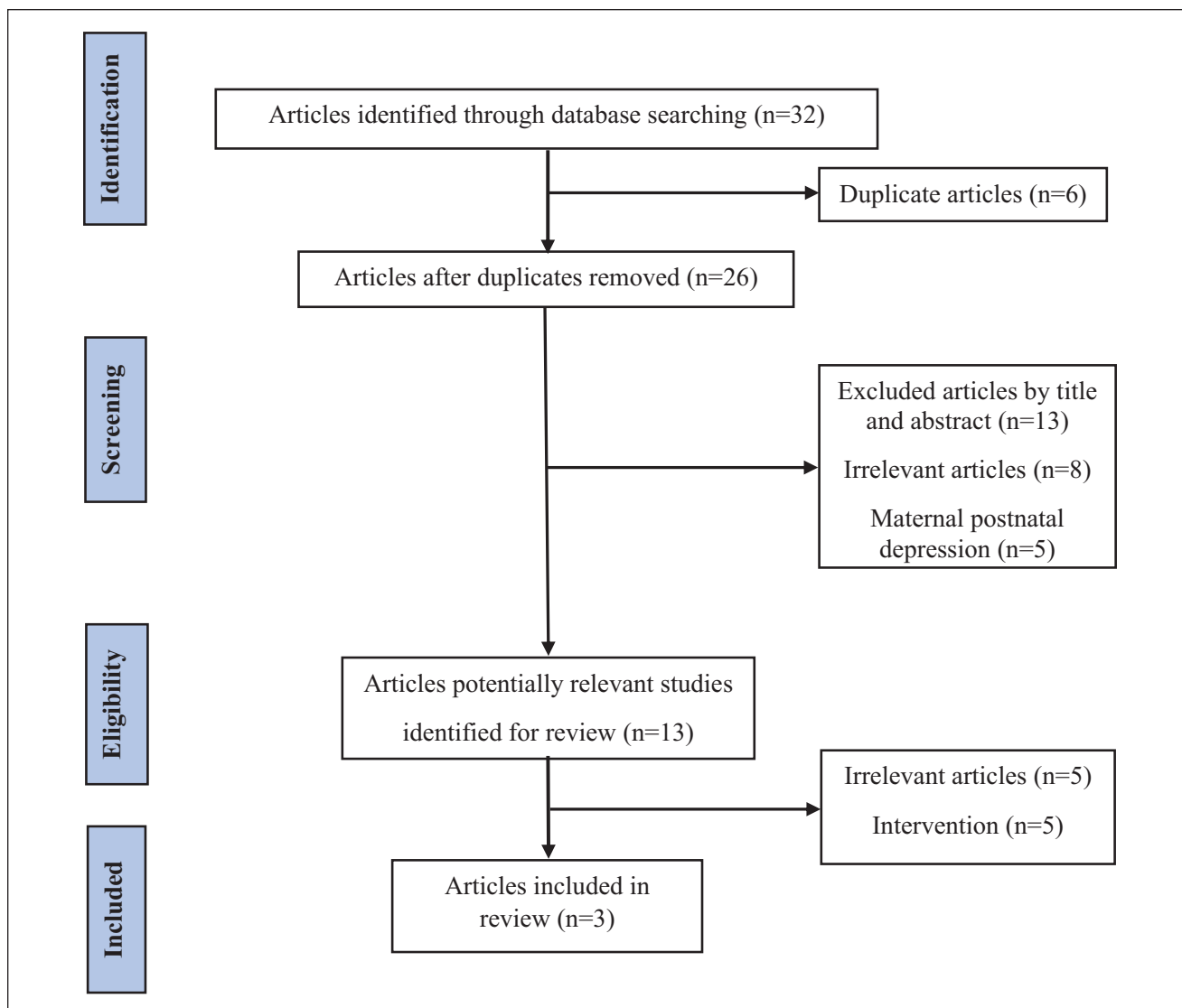


Figure 1. Flowchart of the selection of studies.

Sun et al conducted a cross-sectional study in China. EPDS was used to evaluate PPD. The prevalence of PPD was 13.82% during the COVID-19 pandemic. Individuals reporting smoking and a low family income had high depression risk. In addition, 86.18% of fathers reported having a good family function and had lower PPD.¹⁸

A cross-sectional study was done by Wells and Aronson in Sweden. The EPDS was used for determining of paternal PPD. 21.2% had at least mild depressive symptoms ($EPDS \geq 10$), and 15.8% had severe depressive symptoms. The authors discovered that multiparous fathers received significantly less professional and social support and were invited to child health visits less frequently than primiparous fathers.¹⁹

The findings of this study were classified into 3 main categories, such as: (1) The psychological status of men

during the COVID-19 pandemic; (2) The effect of paternal PPD on children's development and the family psychological status during the COVID 19 pandemic; and (3) The role of healthcare providers in the management of paternal PPD.

Discussion

This is the first review study exploring paternal postpartum depression during the COVID-19 pandemic. The results of this study are discussed in 3 groups.

The Psychological Status of Men During the COVID-19 Pandemic

Numerous studies have shown psychological problems as a result of the COVID-19 pandemic,³ so based on the

results of a study, stress, anxiety, depression, insomnia, denial, anger, financial ability, ability to seek help, social life, and fear are the most common mental health disorders in this pandemic.²⁰ Also, the results of the other studies revealed that the COVID-19 pandemic leads to quarantine, lockdowns, and physical distancing; these lead to increased isolation, anxiety, depression, fear, anger, irritability, financial uncertainties, familial conflicts, excessive use of alcohol and tobacco, and post-traumatic stress disorder. The results of another study indicated that the COVID-19 pandemic can heighten psychological disorders and increase violent behaviors toward family members or even suicide, especially when they suffer from other kinds of mental stress.²¹

In general, loss of life, joblessness, and disruption in main life events can lead to the experience of psychological distress and grief reaction in the general population.³ A study with a large sample size showed that 48% of men and women reported considerable financial concerns, and 66.7% of them stated significant changes in their quality of life due to the COVID-19 pandemic.²²

The Effect of Paternal PPD on Children Development and Family Psychological Status During the COVID 19 Pandemic

Paternal PPD is associated with a variety of outcomes in parent–parent interactions and parent–infant communication.²³ In recent decades, the impact of paternal PPD on children’s development has attracted attention. Some studies have described how paternal PPD could negatively influence parent–infant bonding and lead to emotional problems, hyperactivity, anxiety, depression, and language delays in children.¹³ Child maltreatment 2 months postpartum was related to paternal PPD.²⁴ Moreover, Kerstis et al stated that when parents suffered PPD, impaired bonding with their infant was most prevalent 6 months postpartum.²⁵ Paternal PPD has a noticeable effect on the early development of a child. The healthy interactions between a father and his child correlate with more required neurodevelopment in children. Fathers, even more than mothers, can play an important role in the development of a child’s early behavioral problems.⁵

Additionally, there is a correlation between paternal depression and depression in mothers.²⁶ The psychological well-being of fathers in the postnatal period is critical to the mental health of their wives and children. In this regard, many studies have reported a significant increase in domestic violence against women and children during the pandemic and quarantine.²⁰ It can be dangerous for fathers to have mental problems, and this can have a big impact on their families. This can lead to suicide, violence, conflict, and mental and physical harm for everyone in the family.²²

In this line, study results showed that fathers with poor mental health are less likely to provide effective support to their wives and children.²⁷

It is recommended that screening of fathers’ psychological well-being during the postnatal period should be embedded in health programs. If their emotional disorder is recognized, it needs to be clarified and followed-up by providing appropriate support and interventions.²¹

The Role of Healthcare Providers in the Management of the Paternal PPD

The role of health care providers in family health promotion and preventing parental PPD during the COVID-19 pandemic is necessary. It is also important that prenatal care providers be aware of the potential risks of mental disorders in new parents and the appropriate approaches to reduce the consequences of this situation.⁶ So, it is necessary that they recognize parental PPD by screening and also develop suitable strategies to reduce it.²⁸ Screening and treating PPD have been regarded as cost-effective components of postnatal care.²⁹ The cost of interventions to achieve even minor improvements in PPD outcomes would justify the cost of this illness. Moreover, Edoka et al³⁰ concluded that parental PPD leads to higher mean father–child dyad costs. The promotion of the interpersonal skills of health care providers with patients suffering from depression or psychological problems is the determinant factor of successful results.³¹

During the pandemics, midwives, as one of the health team members, should be involved more than before to assess, prevent, and recognize PPD in new parents and support their mental health.^{6,32} In this regard, midwives should be available to families. They should also recognize at risk fathers of PPD and then reduce their stress and provide accurate and updated information to them. We should use more educational strategies and give families important information to help them better understand parental postpartum depression, lessen depression symptoms, and make more early referrals to healthcare providers.³³

Introducing centers that provide counseling to families is another critical step to promote their mental health. Long-term follow-up and online educational resources help to meet the essential needs of fathers. Furthermore, online and web-based screening instruments, virtual online consultations/counseling, and internet-based psychological support as well as therapeutic interventions can especially be effective instruments.³⁴

Introduction and use of online supplements for all family members in the pandemic should be considered. Due to lockdown, many people are not able to easily access help or care. This can affect their health and well-being, so it is critical to provide various and diverse opportunities for them.

Using internet-based and phone support in offering counseling is useful for health services.³⁵ Midwives can provide online resources, too. All fathers should be screened for the PPD, and those with higher depression scores must be given more attention and necessary interventions. Educational programs and self-care plans such as yoga and breathing techniques should be offered.

Since sexual problems are also common in the postpartum period, midwives can answer the sexual questions of men in a safe space.³⁶ Also, following a healthy, balanced diet, avoiding the use of smoking, alcohol, and other drugs to deal with stress, in addition to doing exercise and avoiding reading too much news about COVID-19, are other approaches to promote emotional well-being.³⁷ When individuals face stressful life events, the lack of social support and protection is basically depressing. Many studies have also identified a lack of social support as a determinant of paternal PPD support diminishes psychological distress and depression and enhances physical health.¹¹ Then it is important that care providers pay attention to the health of their clients and meet their needs.³⁸

Limitations of This Study

As the authors were unfamiliar with other languages except for Persian and English, only studies published in these languages were included in this study. Also, there were limited published articles regarding our title. We think that high-quality research should be done about the prevalence and risk factors for paternal postpartum depression, as well as effective interventions to improve the mental health of new fathers and their families.

Conclusion

Men with parental PPD are more likely to develop psychological disorders related to the COVID-19 pandemic. Paternal PPD can increase mental disorders caused by this pandemic. Therefore, it is essential that all authorities and healthcare providers keep this group's needs in their mind. Moreover, they can play an essential role in the screening, diagnosis, prevention, and treatment of PPD, especially in the current situation of the pandemic. Although in many studies, women were more susceptible to mental disorders due to the COVID-19 pandemic, government authorities should consider paternity leave that can help new fathers have sufficient rest. Moreover, governments should take measures for the financial support of jobless people.

Authors' Contribution

All authors contributed to the design of the study, data collection, data analysis, and drafting and revision of the article.

Declaration of Conflicting Interests

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References

1. Guan W-J, Ni Z-Y, Hu Y, et al. Clinical characteristics of coronavirus disease 2019 in China. *N Engl J Med*. 2020;382(18):1708-1720.
2. Shi L, Lu Z-A, Que J-Y, et al. Prevalence of and risk factors associated with mental health symptoms among the general population in China during the coronavirus disease 2019 pandemic. *JAMA Netw Open*. 2020;3(7):e2014053.
3. Liu CH, Stevens C, Conrad RC, Hahn HC. Evidence for elevated psychiatric distress, poor sleep, and quality of life concerns during the COVID-19 pandemic among US young adults with suspected and reported psychiatric diagnoses. *Psychiatry Res*. 2020;292:113345.
4. Pieh C, Budimir S, Probst T. The effect of age, gender, income, work, and physical activity on mental health during coronavirus disease (COVID-19) lockdown in Austria. *J Psychosom Res*. 2020;139:110278.
5. Liu N, Zhang F, Wei C, et al. Prevalence and predictors of PTSS during COVID-19 outbreak in China hardest-hit areas: gender differences matter. *Psychiatry Res*. 2020;287:112921.
6. Matvienko-Sikar K, Meedya S, Ravaldi C. Perinatal mental health during the COVID-19 pandemic. *Women Birth*. 2020;33(4):309-310.
7. Xiong R, Liu Y, Liang P, Wang Y, Shi S. Prevalence and factors associated with postpartum depression during the covid-19 pandemic among women in Guangzhou, China: a cross-sectional study. *BMC Psychiatry*. 2020;20:557.
8. Kianpoor-Ghahfarokhi F, Haghghi J. The relationship of psychosocial development and the mental health of elderly in Khuzestan province. *Scient Med J*. 2010;6(4):446-453.
9. Rahimi-Movaghar A, Amin-Esmacili M, Sharifi V, et al. Iranian mental health survey: design and field proced. *Iran J Psychiatry*. 2014;9(2):96-109.
10. Field T. Paternal prenatal, perinatal and postpartum depression: a narrative review. *J Anxiety Depression*. 2018;1(1):102-115.
11. Kamalifard M, Bayati Payan S, Panahi S, Hasanpoor S, Babapour Kheiroddin J. Paternal postpartum depression and its relationship with maternal postpartum depression. *J Holistic Nurs Midwifery*. 2018;28(2):115-120.
12. Caparros-Gonzalez RA, Alderdice F. The COVID-19 pandemic and perinatal mental health. *J Reprod Infant Psychol*. 2020;38(3):223-225.

13. Musser AK, Ahmed AH, Foli KJ, Coddington JA. Paternal postpartum depression: what health care providers should know. *J Pediatr Health Care*. 2013;27(6):479-485.
14. Edward K-L, Castle D, Mills C, Davis L, Casey J. An integrative review of paternal depression. *Am J Mens Health*. 2015;9(1):26-34.
15. Taubman-Ben-Ari O, Ben-Yaakov O, Chasson M. Parenting stress among new parents before and during the COVID-19 pandemic. *Child Abuse Negl*. 2021;117:105080.
16. Prime H, Wade M, Browne DT. Risk and resilience in family well-being during the COVID-19 pandemic. *Am Psychol*. 2020;75(5):631-643.
17. Yu Y. *Comparison of Demographic Data Between Fathers With and Without Paternal Postpartum Depression, Especially During the Covid-19, Pandemic*. The Ohio State University; 2021.
18. Sun GQ, Wang Q, Wang SS, Cheng Y. Risk assessment of paternal depression in relation to partner delivery during COVID-19 pandemic in Wuhan, China. *BMC Psychiatry*. 2021;21(1):327.
19. Wells MB, Aronson O. Paternal postnatal depression and received midwife, child health nurse, and maternal support: a cross-sectional analysis of primiparous and multiparous fathers. *J Affect Disord*. 2021;280:127-135.
20. Mazza M, Marano G, Lai C, Janiri L, Sani G. Danger in danger: interpersonal violence during COVID-19 quarantine. *Psychiatry Res*. 2020;289:113046.
21. Glasser S, Lerner-Geva L. Focus on fathers: paternal depression in the perinatal period. *Perspect Public Health*. 2019;139(4):195-198.
22. Solomou I, Constantinidou F. Prevalence and predictors of anxiety and depression symptoms during the COVID-19 pandemic and compliance with precautionary measures: age and sex matter. *Int J Environ Res Public Health*. 2020;17(14):4924.
23. Tissot H, Favez N, Frascarolo F, Despland J-N. Coparenting behaviors as mediators between postpartum depressive symptoms and toddler's symptoms. *Front Psychol*. 2016;7:1912.
24. Kim P, Swain JE. Sad dads: paternal postpartum depression. *Psychiatry*. 2007;4(2):35-47.
25. Kerstis B, Nohlert E, Öhrvik J, Widarsson M. Association between depressive symptoms and parental stress among mothers and fathers in early parenthood: a Swedish cohort study. *Ups J Med Sci*. 2016;121(1):60-64.
26. Paulson JF, Bazemore SD. Prenatal and postpartum depression in fathers and its association with maternal depression: a meta-analysis. *JAMA*. 2010;303(19):1961-1969.
27. Melrose S. Paternal postpartum depression: how can nurses begin to help? *Contemp Nurse*. 2010;34(2):199-210.
28. Kennedy E, Munyan K. Sensitivity and reliability of screening measures for paternal postpartum depression: an integrative review. *J Perinatol*. 2021;41(12):2713-2721.
29. Wilkinson A, Anderson S, Wheeler SB. Screening for and treating postpartum depression and psychosis: a cost-effectiveness analysis. *Matern Child Health J*. 2017;21(4):903-914.
30. Edoka IP, Petrou S, Ramchandani PG. Healthcare costs of paternal depression in the postnatal period. *J Affect Disord*. 2011;133(1-2):356-360.
31. Søvdal LE, Naslund JA, Kousoulis AA, et al. Prioritizing the mental health and well-being of healthcare workers: an urgent global public health priority. *Front Public Health*. 2021;9:679397.
32. Yazdanpanahi Z, Shahamatmanesh M, Babaei A, Hajifoghaha M. Ethics and sentences in midwifery. *Iran J Public Health*. 2015;44(4):598-599.
33. Rabiepoor S, Yas A. Does counseling affect parental postpartum depression? *J Pediatr Neonatal Individ Med*. 2019;8(1):e080101.
34. Thapa SB, Mainali A, Schwank SE, Acharya G. Maternal mental health in the time of the COVID-19 pandemic. *Acta Obstet Gynecol Scand*. 2020;99:817-818.
35. Singh S, Roy D, Sinha K, Parveen S, Sharma G, Joshi G. Impact of COVID-19 and lockdown on mental health of children and adolescents: a narrative review with recommendations. *Psychiatry Res*. 2020;293:113429.
36. Banaei M, Moridi A, Dashti S. Sexual dysfunction and its associated factors after delivery: longitudinal study in Iranian women. *Mater Sociomed*. 2018;30(3):198-203.
37. Fullana MA, Hidalgo-Mazzei D, Vieta E, Radua J. Coping behaviors associated with decreased anxiety and depressive symptoms during the COVID-19 pandemic and lockdown. *J Affect Disord*. 2020;275:80-81.
38. Nahidi F, Hajifoghaha M, Simbar M, Nasiri M. Assessment of prenatal care providers' competencies from the perspective of pregnant women: an Iranian study. *J Patient Exp*. 2022;9:1-7.