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OPEN PEER REVIEW

The Incidence of Postpartum Depression and Associated Factors Among Iranian Healthy Mothers: Findings of a Prospective Cohort Study

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About this report

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1 Original submission

2 comments · 21 Oct 2020 – 10 Feb 2021

Referee 1 Reviewer

MAJOR REVISION 21 Oct 2020

This manuscript seems to be suitable for publication as a short article.

Editor-in-Chief

MAJOR REVISION 10 Feb 2021

Your paper has been evaluated by external peer reviewers. Please make your revisions according to the reviewers' comments. I would appreciate it if you could make the revisions as soon as possible using Track Changes mode in MS Word and colored text.

After revision, authors are obliged to upload a Word file containing the reviewers' comments, in which they have replied to all comments one by one.

Besides, please pay attention to the word count limitation:
Word count limits are declared in this link: http://kowsarpub.com/en/index.php/services/for-authors/895-word-count

We look forward to receiving your revised manuscript. Thank you for sending your work to the Iranian Journal of Psychiatry and Behavioral Sciences.

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Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reviewer 2:

Background of the study is not mentioned in abstract

Response: Thank you for your note. It was added.

What is new in this study?? There are many similar studies in the world and Iran on this subject?

Response: Thank you for your note. In the present study, we calculated the incidence of depression while in other studies, the prevalence of depression was reported. The main difference between prevalence and incidence is that in the calculation of incidence, only new cases of disease, which are taken from cohort studies, are being included, while in prevalence, both old and new cases are being studied on the basis of cross-sectional studies. In addition, variations in measurement tool, inclusion criteria, and the duration of follow-up period may explain these differences.

The authors should indicate the study period with specific date, months and years. Please, indicate the software used, significance level (p value) and CI you used in your study in methods part of your abstract.

Response: Thank you for your note. We added them. Now it reads: "The Cox regression model were used to assess PPD-related factors. Hazard ratio and adjusted hazard ratio and 95% confidence intervals (95% CI) were reported. P values of <0.05 were considered statistically significant. SPSS version 22 (IBM Corp., Armonk, N.Y., USA) was used for analyzed the data.

The method section has many problems:

The estimated sample size is not mentioned.

The sample size for this study is not enough for statistical analysis

The Cos regression is not a suitable statistical method for data analysis in this study design. Generally, it uses for the impact of time on outcome.

Response: Thank you for your note. Based on the study of Doulatian et al., taking into account the prevalence of postpartum depression in vaginal delivery = 13%, the prevalence of postpartum depression in cesarean delivery= 27%, probability of the first type of error = 5%,

and the probability of the second type of error = 20% the sample size was calculated, 164 pregnant women.

This is the minimum sample size required in this study and is statistically sufficient.

Because we examined postpartum depression in the two months postpartum and we have time here and the analysis time to outcome is Cox regression, therefore we used Cox regression.

Introduction: The information given on the incidence and risk factors are very limited. Therefore, more information on risk factors and incidence of PPD should be added with updated references. The effects/impacts of PPD on mothers, newborn, spouse and general community should be mentioned.

Response: Thank you for your note. We added some related information to introduction.

Methods: How the sample size was calculated?

Response: Thank you for your note. By taking into account the prevalence of postpartum depression in vaginal delivery and cesarean section 13% and 27% respectively, and considering the probability of the first type of error = 5% and the second type of error = 20% , the calculated sample size was 164 pregnant women.

How 164 pregnant women were recruited?

Response: Thank you for your note. We used cluster sampling to recruit the participants. After stratifying the city into 10 geographic districts, the list of health centers affiliated to Kerman University of Medical Sciences in each district was provided. From each district, at least one center was chosen randomly using random numbers table.
(Thank you for your note. The list of health centers affiliated to Kerman University of Medical Sciences in each cluster was determined and randomly (using a table of random numbers) selected from among them.)

How randomly selected the sample?

Response: Thank you for your note. The list of health centers affiliated to Kerman University of Medical Sciences in each cluster was determined and randomly (using a table of random numbers) selected from among them.

The authors should reason out why they excluded mothers beyond 16-35 years?

Response: Thank you for your note. Pregnancy in women under the age of 16 and over the age of 35 is considered as high-risk. Therefore, these age groups were excluded from the study (1).

1-Azizi A. Frequency of high risk causes of pregnancy in pregnant mothers in Sanghez. Itanian Journal of Gynecology and infertility. 2015;18(153):19-0.

You said women who underwent emergency cesarean delivery were excluded. However, you mentioned as cesarean delivery was one of the factors associated with PPD in your results. I think the independent variables included in the study are limited (only 8 independent variables), and other important variables which would be associated with PPD are not included.

Response: Thank you for your note. Emergency cesarean section and its associated complications as a negative experience may increase the risk of postpartum depression (1) We excluded emergency cases to prevent selection bias.

1- Eckerdal P, Georgakis MK, Kollia N, Wikström AK, Högberg U, Skalkidou A. Delineating the association between mode of delivery and postpartum depression symptoms: a longitudinal study. Acta obstetricia et gynecologica Scandinavica. 2018;97(3):301-11.

On line 94 you said “The qualitative data were presented using percentage and frequency.”. Was your study qualitative?

Response: Thank you for your note. We meant qualitative variables not data. We revised the sentence in the text.

How about other variables? There are so many variables that can interact with PPD

Response: In this study, based on the literature review, five variables with restriction method in the eligible criteria stage and nine variables in the analysis stage were adjusted.

5- Results: The authors should use separate table to describe univariable analysis of independent variables such as age, type of pregnancy, age at marriage, etc.

Response: Thank you for your note. It was corrected. Descriptive and analytical tables were separated.

Discussion: The information you mentioned in the 1st paragraph of discussion are better to be merged in the introductory part of your manuscript. You didn't discuss the incidence of PPD with the available literature. Please, discuss in more detail with the available literature globally and locally. The authors shouldn't discuss the results of other study. Rather, they have to discuss only the main findings of their study. They shouldn't also discuss independent variables which were not associated with PPD.

Response: Thank you for your note. We revised the discussion. Now it reads:

This study illustrated the current situation of depression during the early post-partum period among Iranian mothers. We showed that around 1 out of 10 Iranian mothers experience PPD in their early post-partum period. The incidence increases among those who underwent cesarean section and get more social support.

As we showed, around 10 % of Iranian pregnant women are at the risk of getting PPD. To our knowledge, a vast majority of the current evidence around the world, including Iran are on prevalence of PPD and not its incidence which limits the comparability of results with other studies. Based on a systematic review carried out in Iran, the prevalence of PPD is estimated to be 24.3 % (11). In studies conducted in other parts of the world, the prevalence of PPD reported at 7 % in Ghana (2018), 12 % in Ireland (2018), and 14.6 % in China (2018) (20-22). In a study conducted in Korea, the incidence of PPD in pregnant women was less than 1% (2017) (23). A possible explanation for the difference between the results of the current study and national estimate can be due to the type of measured index. In the present study, we calculated the incidence of PPD while in other studies, the prevalence was reported. The main difference between prevalence and incidence is that in the calculation of incidence, only new cases of disease, which are taken from cohort studies, are being included, while in prevalence, both old and new cases are being studied on the basis of cross-sectional studies. In addition, variations in measurement tool, inclusion criteria, and the duration of follow-up period may explain these differences (24).

The present study showed that cesarean section reduces the risk of PPD. This finding is consistent with the finding of a meta-analysis conducted in 2017 (25).Similarly, the results of studies conducted in Iran(2017), Brazil (2019) and Poland (2020) confirm our finding (26-29). A possible explanation for this association could be the fear of NVD and related pain among mothers (30).

We also showed that getting more social support reduces the risk of PPD which is consistent with the findings of studies conducted in Iran (2019), U.S.A (2018) and, Italy (2017) (31-34). Social support could act as a social shock absorber and a protective factor in dealing with stressful life events. Social support increases the mother's sense of security and hope. It makes the mothers feel beloved, cared, valued and respected (28, 35). Social support is one of the most important predictors of psychiatry disorder and its improvement leads to a healthier and happier life and decreases the depression (35).

The references are need to update.

Response: Thank you for your note. We updated the references.

7- References: Please, try to use as more references as possible with the updated one.

Response: Thank you for your note. We added the following references

1. Pinar G, Avsar F, Aslantekin F. Evaluation of the impact of childbirth education classes in Turkey on adaptation to pregnancy process, concerns about birth, rate of vaginal birth, and adaptation to maternity: a case-control study. Clinical nursing research. 2018;27(3):315-42.
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16. Mahdavy M, Kheirabadi G. The Prevalence of Postpartum Depression and Its Related Factors among Women in Natanz City in 2018 (Iran). Qom University of Medical Sciences Journal. 2020;14(2):78-85.

17. Maryam N, Zahra A, Naghmeh M, Zahra K, Zahra BHS, Saeed I. Relationship between delivery type and postpartum depression. Principles of Mental Health. 2012;14(1):46-53.
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2 Revision 1

1 comment · 10 Dec 2021

Editor-in-Chief

MINOR REVISION 10 Dec 2021

Thank you for your recent revisions.
Your paper has now been evaluated again. According to the reviewers' and associate editor's comments, it needs some more revisions. Please make your revisions according to these comments. The full manuscript file must be highlighted to indicate revised texts.

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Revision 2

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reviewers' Comments:

Reviewer 1:

1- The keywords are not arranged alphabetically

Authors' response: thank you for your note. It was corrected.

“Incidence, Iran, Postpartum Depression (PPD), Pregnant women,”

2- In the introduction, the forty-fourth sentence is complete without "after delivery" so it is better to delete it.

Authors' response: thank you for your note. It was deleted.

“It is estimated that 17% of healthy mothers around the world suffer from PPD”

3- With what tools or checklist did you check for a stressful event? And how?

Authors' response: thank you for your note. We assessed the postpartum depression using the Edinburgh Depression questionnaire. We did not measure stress and we referenced to the last sentence.

“As the postpartum period is a stressful transition period for most mothers (15), determining the incidence of PPD provides a more realistic picture of PPD among healthy mothers. Hence, this study aimed to provide an insight into PPD incidence among Iranian women during the early postpartum period.”

4- In sentence number 85, you probably mean an independent variable, not a dependent one

Authors' response: thank you for your note. It was corrected.

“The independent variables were participants' and spouses' age…..”

Reviewer 2:

Thank you for revising the manuscript. I think necessary revisions have been done and the manuscript could be published in the journal. My decision: accept

Authors' response: thank you for your attention.

3 Revision 2

1 comment · 19 Nov 2022

Editor-in-Chief

ACCEPT 19 Nov 2022

We have completed our review of your manuscript and are pleased to inform you that it is being considered for publication in the IJPBS. Note that the publication of your article will only be finalized with your cooperation in the editorial process.
Thank you for your fine contribution. On behalf of the Editors of IJPBS, we look forward to your continued contributions to the Journal.