PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Effectiveness of psychological, psychoeducational and psychosocial interventions to prevent postpartum depression in adolescent and adult mothers: study protocol for a systematic review and meta-analysis of randomized controlled trials.
AUTHORS	Martín-Gómez, Carmen; Moreno-Peral, Patricia; Bellón, Juan A.; Conejo Cerón, Sonia; Campos-Paino, Henar; Gómez-Gómez, Irene; Rigabert, Alina; Benítez, Isabel; Motrico, Emma

VERSION 1 - REVIEW

REVIEWER	Peng Xie Department of Neurology and Psychiatry Chongqing Medical University, Chongqing, China
REVIEW RETURNED	14-Oct-2019

GENERAL COMMENTS	This paper aimed to address an important clinical issue – effectiveness of psychological, psychoeducational and psychosocial interventions to prevent postpartum depression. However, the present protocol exist substantial issues and many detailed methods are not clear. Thus, I think the current work is far from the stage of publication. Major Comments: 1. I am concerned about the outcomes part of the study. 1) The main outcome was the effectiveness of the interventions, using the incidence of new cases of postpartum depression and/or the reduction of postpartum depressive symptoms, then, if this study focus interventions, why not included the acceptability, adverse effects or others as the secondary outcomes. That could be more comprehensive for the assessment; 2) How to define the time of the incidence of new cases of postpartum depression? Posttreatment or follow-up period? The introduction part mentioned “empirical research considers the ‘postpartum period’ to be from the first hours after delivery to one year after childbirth”. Does it mean this was the time point of the evaluation of incidence of new cases? If so, how to extract data from different trials with different follow-up period? 3) The author said “a hierarchy will be developed, and the instrument most used across all the studies will be selected”. Then I think there should be a list of the hierarchy of depression symptom severity measurement scales. 2. For the inclusion criteria in this protocol. If the patients had a

	diagnosis of comorbid general psychiatric disorders, for example, anxiety disorder, PTSD, whether included or not? 3. What is the definition of active control condition, including which kinds of control condition? 4. What is the definition of the female's partner or others were included in sessions. For the psychological treatment, different trials may involve families in different number of sessions. 5. For the study design part, whether cross-over trials or quasirandomised trials will be included in the meta-analysis? Will the sample size, study duration, the number of treatment sessions and blinding be limited? 6. The main outcome was the effectiveness of the interventions, using the incidence of new cases of postpartum depression and/or the reduction of postpartum depressive symptoms. This was dichotomous efficacy outcomes, why use standardized mean differences to calculate the effect sizes? 7. The Supplementary file: PICOS Search Strategy. The Outcome part should be list in the Population part. Minor Comments: 1. I think the " I2" (Page 2 line 29, Page 9 line 54) format was not correct. 2. Some reference format was not correct.

REVIEWER	Elizabeth O'Connor Kaiser Permanente Research Affiliates Evidence-Based Practice Center, Center for Health Research, USA
REVIEW RETURNED	16-Dec-2019

GENERAL COMMENTS	This is a well-written and appropriately detailed protocol for a review on an important topic. I just have a couple of points of clarification and suggestions. 1. In your inclusion criteria, it seems that you will not include studies of women recruited during pregnancy. I know there are studies in this area that begin during pregnancy and I would suggest including them. 2. Under data extraction you state that you will extract "whether they belong to an ethnic minority". Do you mean that you'll extract the % of patients in the sample who belong to an ethnic minority? 3. For extraction of session details, there is no mention of number of sessions, estimated contact hours, or intervention duration, but I think some measure of intervention dose along these lines would be very valuable. 4. You mention under the Meta-Analysis section that sensitivity analyses will be performed regarding the average of all follow-ups reported in the studies. I don't understand what you mean by this. Do you mean for each study you'll calculate an average effect size across all follow-up all timepoints? I've never heard of this approach. Have you seen other reviewers conduct this analysis? An alternative

	sensitivity analysis might be getting as close as possible to a specific post-partum month, such as 6 months post-partum. 5. I'm concerned that your analysis of the impact of patient characteristics on effect size will be vulnerable to ecological bias if the variables entered into the analysis are study-level means and proportions such as the %reporting a characteristic. (See, eg, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2575558/). Instead, I would suggest categorizing the studies as being high or low on the characteristics of interest, and analyzing the dichotomous form of the predictor.

REVIEWER	Bussara Sangsawang Srinakharinwirot University, Thailand
REVIEW RETURNED	23-Dec-2019

GENERAL COMMENTS	This is an interesting paper. The authors presented a study protocol for a systematic review and meta-analysis of randomized controlled trials to assess the effectiveness of psychological, psychoeducational and psychosocial interventions in preventing postpartum depression (PPD). A systematic review and a meta-analysis design were used. I have read carefully and found that this study is very carefully created and developed. Although this study has scientific interest, several important aspects should be reviewed by the authors. I hope that my opinions will help shape your research article more precise and interesting. The followings are my comments; Title: The title of the study is brief and informative completely clear. The title indicates the independent variable, dependent variables, and study design but not the sample. Therefore, the authors should add the sample such as adult and/or adolescent mothers in the title. The authors may use the new title “Effectiveness of psychological, psychoeducational and psychosocial interventions to prevent postpartum depression in adult mothers: study protocol for a systematic review and meta-analysis of randomized controlled trials.” Abstract: The authors presented an appropriate and clear detail about the abstract section, but some points should add in topics as following: Introduction and aim: the authors clearly stated the introduction and aim of the study. Methods: the authors clearly presented about study design, protocol (PRISMA guidelines), search engines, selection criteria, statistics, risk of bias and publication bias but exclusion criteria of the study were not showed. The authors please state in the topic. Ethics and dissemination: the authors clearly stated the ethics and dissemination of the study. However, the authors please start the sentence with the ethics. Key words: the authors not indicated the key words of the study. Therefore, the authors please indicate appropriate key words to guide the reader to easily find a good research title and attract to read it. Introduction: The author wrote the introduction in orderly manner beginning from

	definition and onset, symptoms of PPD, impacts of PPD, prevalence of PPD, treatment of PPD, and differences between previous studies and present study. Moreover, the authors presented a clear state of the aims of the study and showed the congruence with the aim of the study in the abstract section. However, the authors should add more significant details as following: In page 5 of 16, lines 7-12, the authors should add more details about the linkage between the definition of PPD and postpartum period (first hours after delivery to one year after childbirth). Moreover, the authors should explain why the PPD in the study was measured at first hours after delivery to one year after delivery. In page 5 of 16, lines 29-37, the authors should explain why the study focused on 3 interventions (psychological, psychoeducational and psychosocial interventions) to prevent PPD. In page 6 of 16, after lines 11, the authors should add more details about the expected outcomes of the study. Methods and analysis: Research design: The authors not indicated design of the study. Therefore, the authors please indicate the study design. Protocol: The protocol of the study was clear and the registration number was presented. Eligibility criteria: The eligibility criteria of the study were clear. Participants: In page 6 of 16, lines 34, the authors should indicate age of the participants (more than 18 years). In page 6 of 16, lines 40, the authors should add other measurements of PPD Type of interventions: The type of interventions in the study was clear. Comparators: The comparators in the study were clear. Outcomes: The outcomes in the study were clear. Study design: The study design in the study was clear. Setting and language: The setting and language in the study were clear. Information resources and search strategy: The electronic databases for searching literature were clear. In page 9 of 16, lines 3-4, the authors should more indicate keywords that used for searching literature such as psychological intervention, psychoeducational intervention, psychosocial intervention, home visit, telephone visit, IPT, CBT, social support or family support. Study selection: The study selection in the study was clear. Data extraction: The data extraction in the study was clear. Risk of bias: The risk of bias in the study was assessed by using the Cochrane Collaboration risk of bias tool. It is an appropriate tool and the authors clearly presented in details of the Cochrane Collaboration risk of bias tool. Assessment of publication bias: The assessment of publication bias in the study was clear. Meta-analysis:

	The detail of meta-analysis in the study was clear. Quality of evidence: The quality of evidence in the study was assessed by using the Grading of Recommendations Assessment, Development and Evaluation (GRADE). It is an appropriate tool and the authors clearly presented in details of the tool. Ethics and dissemination: The authors clearly stated the ethics and dissemination of the study. However, the authors please start the sentence with the ethics. Discussion: The authors clearly stated the discussion of the study. Strengths and limitations of the study: The authors clearly described the strengths and limitations of the study. References: In the references part, I found that the authors used the correct format of the Vancouver style. The references that the authors cited in the text were published in the high standard journals in psychiatry field and had high relevance to the study which the authors interested in postpartum depression in women such as Archives of Women's Mental Health, the Lancet Psychiatry and Journal of Affective Disorders. However, some references in the study are out of date such as reference number 6 (year 2000), 9 (year 2006), 12 (year 2007) and 14 (year 2008) because the references were published more than 10 years. There were assumed that the knowledge from the previous published articles is out of date. Please update your reference list. Moreover, in the reference number 27, I found new version of the book was published in the 3rd Edition in year 2017. In the reference number 28, I found new version of the book was published in the 3rd Edition in year 2003.

VERSION 1 – AUTHOR RESPONSE

Reviewer #1: responses in blue

This paper aimed to address an important clinical issue –effectiveness of psychological, psychoeducational and psychosocial interventions to prevent postpartum depression. However, the present protocol exist substantial issues and many detailed methods are not clear. Thus, I think the current work is far from the stage of publication.

Thank you for your comments; they will help us to improve our manuscript.

Major Comments:

1. I am concerned about the outcomes part of the study.

1) The main outcome was the effectiveness of the interventions, using the incidence of new cases of postpartum depression and/or the reduction of postpartum depressive symptoms, then, if this study focus interventions, why not included the acceptability, adverse effects or others as the secondary outcomes. That could be more comprehensive for the assessment;

Thank you for this interesting comment. We appreciate the proposal to include other related measures as secondary outcomes, however, we believe that the scope of this study should be limited to the primary outcome of effectiveness. We hope to be able to expand our outcomes and include these in further research studies in the future.

2) How to define the time of the incidence of new cases of postpartum depression?
Thank you for this stimulating question. Based on previous research (1–4), we consider that the postpartum period is the whole first year after delivery. Therefore, any measure assessed during this year will be valid to be included in the meta-analysis. We also clarify in the section “Outcomes” the following (changes in bold): Studies will be included when they report the incidence of new cases of postpartum depression and/or the reduction of postpartum depressive symptoms during the first year postpartum as a primary or secondary outcome (p. 7).

Furthermore, some recent SR/MA on this topic have also considered the postpartum period to be the whole first year after delivery (5–7).

Posttreatment or follow-up period?
To perform the meta-analysis, we will select the first postpartum measure reported in the study, regardless of the postpartum month, which was assessed always within the first year from birth. On p. 9, we indicate that “The first post-intervention measure that was assessed after delivery and reported in the study will be the measure used for the effect size analyses”. This clarification is because, in cases of prepartum interventions, studies could report the first posttreatment measure before delivery, and this evaluation cannot be considered a measure of postpartum depression. In these cases, we selected the first posttreatment and postpartum assessment (a follow-up measure) to include the data in our meta-analysis.

The introduction part mentioned “empirical research considers the ‘postpartum period’ to be from the first hours after delivery to one year after childbirth”. Does it mean this was the time point of the evaluation of incidence of new cases? If so, how to extract data from different trials with different follow-up period?
Yes. The time point of the evaluation of the incidence of new cases is during the whole first year postpartum. To extract data, we will look at the data reported in the chosen studies, and we will select the first measure of depression assessed after delivery, regardless of the postpartum month in which it was assessed, but always within the first year from birth. We described this procedure in the “Outcomes” section on p. 7.

3) The author said “a hierarchy will be developed, and the instrument most used across all the studies will be selected”. Then I think there should be a list of the hierarchy of depression symptom severity measurement scales.
Thank you for this comment. We said on p. 7 “if more than one scale was used to measure postpartum depression in the same study, the following action will be taken: a hierarchy will be developed, and the instrument most used across all the studies will be selected.” The proposed hierarchy is based on the frequency of use of each scale, so the outcomes reported for the most used scale would be the selected to be included in the meta-analysis. In this way, the hierarchy should be developed when the studies had been selected, as we do not yet know the most used. Therefore, we are very sorry, but at this time, we cannot offer the hierarchy we will use because we do not know the studies that will be included in this SR/MA, and, therefore, we also do not know the scales they have used to measure the symptoms of depression. This proposal is based on information in Dr. Cuijpers’ book, “Meta-analyses in mental health research. A practical guide” (pp. 75-76) (8).

2. For the inclusion criteria in this protocol. If the patients had a diagnosis of comorbid general psychiatric disorders, for example, anxiety disorder, PTSD, whether included or not?
Thank you for this comment. We excluded only participants who had a diagnosis of depression at baseline; therefore, if the participants had any other kind of psychiatric disorders at baseline, they were included. We added in “Participants” section “It is not required that psychiatric disorders other than depression have been ruled out at baseline” (p. 5).

3. What is the definition of active control condition, including which kinds of control condition?
Thank you for this important observation. When we write “active control condition”, we refer to any type of intervention for which there is no available evidence about its effectiveness in preventing postpartum depression. This definition is included in the “Comparators” section on p. 7. This kind of control condition is also named “attention control”, so we changed each use of “active control” in the manuscript to “attention control” (pp. 2, 6, 7).

4. What is the definition of the female’s partner or others were included in sessions. For the psychological treatment, different trials may involve families in different number of sessions.
Thank you for this reflection. As this SR/MA will include primary studies, we will consider the inclusion of couples and/or other family members described in our own studies.

5. For the study design part, whether cross-over trials or quasirandomised trials will be included in the meta-analysis? Will the sample size, study duration, the number of treatment sessions and blinding be limited?
The study will include only RCT methodology and cluster RCT, other design will be excluded. We specify the following: “other kinds of design such as crossover trials or quasi-randomized trials will be excluded from this RS/MA” (p. 7).

Characteristics such as sample size, study duration and the number of treatment sessions have no limitations, and they will be described in the qualitative analysis.

The blinding has no limitation, and it will be assessed through the Cochrane Collaboration risk of bias tool. The fourth point of this tool is about this topic “blinding of the outcome assessments”. We describe this procedure on p. 9.

We added in the “Study design” section the following (p. 7): “Characteristics such as sample size, study duration and the number of treatment sessions have no limitations and will be described in the qualitative analysis. The blinding also does not have limitation, but it will be assessed through the Cochrane Collaboration risk of bias tool”.

6. The main outcome was the effectiveness of the interventions, using the incidence of new cases of postpartum depression and/or the reduction of postpartum depressive symptoms. This was dichotomous efficacy outcomes, why use standardized mean differences to calculate the effect sizes?
Thank you for this interesting comment. Based on previous similar SR/MA, we will expect that the majority of the studies included in this SR/MA will report the difference between the intervention and control groups in terms of symptoms of depression (average and standard deviation), which is the rationale behind the proposal of the use of the standardized mean difference to calculate effect sizes. When studies report only the incidence of new cases of postpartum depression (in this case, dichotomous outcomes), through the software Comprehensive Meta-Analysis, we will calculate the equivalent SMD.

7. The Supplementary file: PICOS Search Strategy. The Outcome part should be list in the Population part.
Thank you for this comment. We follow the PICOS schema (population, intervention, comparator, outcome, study design) in our search strategy as well as in our inclusion and exclusion criteria (9). As we understand the PICOS schema, the outcome is an independent part of the population. To be more inclusive, we do not include population restrictions in the search strategy. The selection will be performed using the inclusion and exclusion criteria previously defined (p. 5,6).

Minor Comments:
1. I think the “I2” (Page 2 line 29, Page 9 line 54) format was not correct.

Thank you for this remark. We changed to the correct format (I2) on pp. 2 and 10.

2. Some reference format was not correct.
Thank you for this comment. We revised each reference, and we have changed those that were not correct.

Reviewer #2: comments in blue
This is a well-written and appropriately detailed protocol for a review on an important topic. I just have a couple of points of clarification and suggestions.
Thank you for your comment. We appreciate your positive feedback.

1. In your inclusion criteria, it seems that you will not include studies of women recruited during pregnancy. I know there are studies in this area that begin during pregnancy and I would suggest including them.
Thank you for this important observation. Since some interventions may begin before delivery, pregnant women will be included. We clarify this information in the abstract, including “pregnant females” (p.2), in the “Participant” section, adding “Since some interventions may begin before delivery, pregnant women will also be included when the study reports a measure of postpartum depression after delivery” (p.5). We have also included this in table 1 (p. 6) “Pregnant females will be included when the study reports a measure of depression after delivery”

Additionally, in the section “Type of intervention”, we explained that “interventions carried out before and/or after delivery will be included”. In the section “Data extraction”, we explained that information on “session details for the intervention group (…, whether there were prenatal or postnatal sessions)” was extracted.

2. Under data extraction you state that you will extract "whether they belong to an ethnic minority". Do you mean that you'll extract the % of patients in the sample who belong to an ethnic minority?
Thank you for this note. We wanted to say that it will be identified whether the intervention is aimed explicitly at people who belong to a specific ethnic minority. We added on p. 8 (changes in bold): The qualitative data that will be collected will include author/year and country, target population characteristics (whether the females are nulliparous or multiparous, whether they are adolescents or adults, whether the intervention is aimed explicitly at females who belong to a specific ethnic minority, (…).

We also specify in p. 10, when we explain the planned subgroup analysis, the following (changes in bold): ethnicity (whether the intervention is aimed at females from a specific ethnicity or not) (p. 10).

3. For extraction of session details, there is no mention of number of sessions, estimated contact hours, or intervention duration, but I think some measure of intervention dose along these lines would be very valuable.
Thank you very much for this observation. We added this information on p. 8 (changes in bold): sessions details for the intervention group (type of prevention, type of intervention, orientation, setting and provider, intervention duration (number of sessions and estimated contact hours, frequency of sessions).

4. You mention under the Meta-Analysis section that sensitivity analyses will be performed regarding the average of all follow-ups reported in the studies. I don't understand what you mean by this. Do you mean for each study you'll calculate an average effect size across all follow-up all timepoints? I've never heard of this approach. Have you seen other reviewers conduct this analysis? An alternative sensitivity analysis might be getting as close as possible to a specific post-partum month, such as 6 months post-partum.

Thank you very much for this comment. Yes, this means that for each study, an average effect size will be calculated across all follow-up timepoints. This approach has been carried out in other publications of some authors from this manuscript. Some of the publications are as follows:

- Rigabert, A., Motrico, E., Moreno-Peral, P., Resurrección, D. M., Conejo-Cerón, S., Navas-Campaña, D., & Bellón, J. Á. (2018). Effectiveness of online interventions in preventing depression: a protocol for systematic review and meta-analysis of randomised controlled trials. BMJ open, 8(11), e022012.

- Moreno-Peral, P., Conejo-Cerón, S., Rubio-Valera, M., Fernández, A., Navas-Campaña, D., Rodríguez-Morejón, A., ... & Rodríguez-Bayón, A. (2017). Effectiveness of psychological and/or educational interventions in the prevention of anxiety: a systematic review, meta-analysis, and meta-regression. JAMA psychiatry, 74(10), 1021-1029.

- Conejo-Cerón, S., Moreno-Peral, P., Rodriguez-Morejon, A., Motrico, E., Navas-Campana, D., Rigabert, A., ... & Garcia-Campayo, J. (2017). Effectiveness of psychological and educational interventions to prevent depression in primary care: a systematic review and meta-analysis. The Annals of Family Medicine, 15(3), 262-271.

5. I'm concerned that your analysis of the impact of patient characteristics on effect size will be vulnerable to ecological bias if the variables entered into the analysis are study-level means and proportions such as the %reporting a characteristic. (See, eg,). Instead, I would suggest categorizing the studies as being high or low on the characteristics of interest, and analyzing the dichotomous form of the predictor.
Thank you very much for this important suggestion. We also believe that overcoming ecological bias is a very important issue. We will try to do that to some extent by conducting a different subgroup analysis regarding the characteristics of the studies. We added this information in p.10 (changes in bold):

“To explore the heterogeneity across studies, subgroup analysis will be performed using a mixed-effects model according to the following variables: previous deliveries (primiparous only versus primiparous and multiparous); previous history of depression (females without previous history of depression only versus females with and without history of depression); risk level (females with specific risk factors versus the general population); age (adolescents versus adolescents and adults); ethnicity (studies focus on a specific ethnic group vs studies do not focus a specific ethnic group); and intervention timing (prepartum only versus prepartum and postpartum versus postpartum only)”.

We know that the best way to combine the patient characteristics within the studies would be to perform a meta-analysis of individual patient data. From such a meta-analysis, it is possible to study the predictors and moderators of effectiveness. These variables change within the studies because they depend on the characteristics of the participants. This issue is one of the future studies planned by our research group.

Reviewer #3: comments in blue
This is an interesting paper. The authors presented a study protocol for a systematic review and meta-analysis of randomized controlled trials to assess the effectiveness of psychological, psychoeducational and psychosocial interventions in preventing postpartum depression (PPD). A systematic review and a meta-analysis design were used.
I have read carefully and found that this study is very carefully created and developed. Although this study has scientific interest, several important aspects should be reviewed by the authors. I hope that my opinions will help shape your research article more precise and interesting. The followings are my comments;

Thank you very much for your compliments.

Title:
The title of the study is brief and informative completely clear. The title indicates the independent variable, dependent variables, and study design but not the sample. Therefore, the authors should add the sample such as adult and/or adolescent mothers in the title. The authors may use the new title “Effectiveness of psychological, psychoeducational and psychosocial interventions to prevent postpartum depression in adult mothers: study protocol for a systematic review and meta-analysis of randomized controlled trials.”
Thank you very much for your comment and your proposal of a new title. We will include adults and adolescent mothers in this SR/MA. We changed the title (changes in bold): Effectiveness of psychological, psychoeducational and psychosocial interventions to prevent postpartum depression in adolescent and adult mothers: study protocol for a systematic review and meta-analysis of randomized controlled trials (p.1).

We added a clarification in the “Participants” section: Adolescent and adult women will be included (p. 5). We also planned to perform a subgroup analysis taking into account the age of the women at which each study is aimed (whether adolescents or adults) (p. 10).

Abstract:
The authors presented an appropriate and clear detail about the abstract section, but some points should add in topics as following: Introduction and aim: the authors clearly stated the introduction and aim of the study. Methods: the authors clearly presented about study design, protocol (PRISMA guidelines), search engines, selection criteria, statistics, risk of bias and publication bias but exclusion criteria of the study were not showed. The authors please state in the topic.
Thank you very much for your comment. We consider that we refer to our main exclusion criteria, that is, women depressive at baseline. In the abstract, we explain “the selection criteria will be as follows: 1) subjects will be pregnant females or females who have given birth in the last 12 months and who were non-depressive at baseline (…).”

Ethics and dissemination: the authors clearly stated the ethics and dissemination of the study. However, the authors please start the sentence with the ethics.
Thank you for the observation. We changed the sentence and started with ethics (p. 2): Ethics and dissemination: “The ethical assessment was not required. The results will be presented at conferences and disseminated through publications”.

Key words: the authors not indicated the key words of the study. Therefore, the authors please indicate appropriate key words to guide the reader to easily find a good research title and attract to read it.
Thank you. We added the following keywords (p. 2): “postpartum depression, prevention, systematic review, meta-analysis, and study protocol”.

Introduction:
The author wrote the introduction in orderly manner beginning from definition and onset, symptoms of PPD, impacts of PPD, prevalence of PPD, treatment of PPD, and differences between previous studies and present study. Moreover, the authors presented a clear state of the aims of the study and showed the congruence with the aim of the study in the abstract section.
Thank you for your positive feedback.

However, the authors should add more significant details as following:
In page 5 of 16, lines 7-12, the authors should add more details about the linkage between the definition of PPD and postpartum period (first hours after delivery to one year after childbirth).

Thank you for this comment. On the one hand, previous studies place the postpartum period as the whole first year postpartum (4,10,11). On the other hand, we follow the recommendation of O'Hara and McCabe (2013): "there is no consensus as to what constitutes the postpartum period for the purposes of research on PPD, and it is likely that different time frames will be used for different purposes. For example, shorter periods may be used for biological studies, and longer periods will be used for social studies and treatment or prevention studies." (p. 382). Based on this previous information and with the aim of being more inclusive, we consider that the postpartum depression period covers the whole first year postpartum. This consideration has been done in some recent SRs/MAs on this same topic (5–7).

To better justify this issue in the manuscript, we include more references (p. 4) for the definition, as follows: "Despite these criteria, empirical research and reviews considers the "postpartum period" to be from the first hours after delivery to one year after childbirth (4–7). The new references are the followings:

- 5. American College of Obstetricians and Gynecologists. Screening for perinatal depression. Committee opinion no. 630. Obstet Gynecol. 2015; 125:1268–1271. https://doi.org/10.1097/01.AOG.0000465192. 34779.dc PMID: 25932866
- 6. O'Hara, M. W., & McCabe, J. E. (2013). Postpartum depression: current status and future directions. Annual review of clinical psychology, 9, 379-407.
- 7. Gaynes, B. N., Gavin, N., Meltzer-Brody, S., Lohr, K. N., Swinson, T., Gartlehner, G., ... & Miller, W. C. (2005). Perinatal depression: Prevalence, screening accuracy, and screening outcomes: Summary. In AHRQ evidence report summaries. Agency for Healthcare Research and Quality (US).

Furthermore, we added the following (changes in bold): "Despite these criteria, empirical research and reviews consider the "postpartum period" to be from the first hours after delivery to one year after childbirth" (p.4).

Moreover, the authors should explain why the PPD in the study was measured at first hours after delivery to one year after delivery.
Thank you for this comment. Based on the information beforementioned, we consider that the postpartum depression period covers the whole first year postpartum. For this reason, we consider measuring postpartum depression from the first hours after delivery to one year after childbirth, as has been done in some recent SRs/MAs on this same topic (5–7).

In page 5 of 16, lines 29-37, the authors should explain why the study focused on 3 interventions (psychological, psychoeducational and psychosocial interventions) to prevent PPD.
Thank you for this comment. The rationale for basing this SR/MA on psychological, psychoeducational and psychosocial interventions is that they are the most frequent type of intervention to prevent mental disorders in general, specifically depression, as shown in the last SR/MA (7).

We added the following information: The majority of preventive interventions for depression available are based on psychological, psychoeducational or psychosocial approaches (p. 4).

In page 6 of 16, after lines 11, the authors should add more details about the expected outcomes of the study.
Thank you for this request. We have not defined expected outcomes because the goal is to synthetize and combine results from different studies. Furthermore, in line with the meta-analysis design, we should avoid "researcher allegiance", which can act as threat to validity (8). Researcher allegiance can be defined as "belief in the superiority of a treatment and in the superior validity of the theory of change that is associated with the treatment". Some meta-analyses have found that "researcher allegiance" is related to higher outcomes for the preferred treatment (8,12–14). For this reason, we

define the aim of the study only through the PICOS schema in p. 5: Given the aforementioned reasons, the goal of this study is to conduct an SR/MA of randomized controlled trials assessing the effectiveness of psychological, psychoeducational and psychosocial interventions in preventing PPD in females during the first postpartum year.

Methods and analysis: Research design: The authors not indicated design of the study. Therefore, the authors please indicate the study design.
Thank you. We have included that the design is an SR/MA (changes in bold): “This is a protocol for an SR/MA whose design has followed PRISMA-P (Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols 2015 Statement)” (p. 5).

Protocol:
The protocol of the study was clear, and the registration number was presented. Eligibility criteria: The eligibility criteria of the study were clear.
Thank you.

Participants:
In page 6 of 16, lines 34, the authors should indicate age of the participants (more than 18 years).
Thank you for this comment. However, our SR/MA is not limited to adult women. We added the follow information: Adolescent and adult women will be included (p. 5).

In page 6 of 16, lines 40, the authors should add other measurements of PPD.
Thank you for this comment. We added the following information (changes in bold): (p. 5). To this end, depression will be required to have been discarded through any of the following criteria at baseline: diagnosis by a mental health specialist, validated scales with standard cut-off points (e.g., PHQ-9 or Edinburgh Postnatal Depression Scale) or standardized interviews (e.g., Structured Clinical Interview for DSM Disorder or Composite International Diagnostic Interview).

Type of interventions: The type of interventions in the study was clear.
Comparators: The comparators in the study were clear.
Outcomes: The outcomes in the study were clear.
Study design: The study design in the study was clear.
Setting and language: The setting and language in the study were clear.
Information resources and search strategy: The electronic databases for searching literature were clear.
Thank you.

In page 9 of 16, lines 3-4, the authors should more indicate keywords that used for searching literature such as psychological intervention, psychoeducational intervention, psychosocial intervention, home visit, telephone visit, IPT, CBT, social support or family support.
Thank you for this remarkable comment. We describe in this section the type of keywords that we will use for the electronic search, and we provide details about the search in the supplementary file. Although we consider that it would be of great form to design the search strategy by using a more exclusive type of intervention, we will not include a specific kind of intervention in our search strategy so as to be more inclusive. The type of intervention will be evaluated in our inclusion criteria.

Study selection: The study selection in the study was clear
Data extraction: The data extraction in the study was clear.
Risk of bias: The risk of bias in the study was assessed by using the Cochrane Collaboration risk of bias tool. It is an appropriate tool and the authors clearly presented in details of the Cochrane Collaboration risk of bias tool. Assessment of publication bias: The assessment of publication bias in the study was clear. Meta-analysis: The detail of meta-analysis in the study was clear. Quality of

evidence: The quality of evidence in the study was assessed by using the Grading of Recommendations Assessment, Development and Evaluation (GRADE). It is an appropriate tool and the authors clearly presented in details of the tool.
Thank you.

Ethics and dissemination: The authors clearly stated the ethics and dissemination of the study. However, the authors please start the sentence with the ethics.
Thank you for the observation. We changed the sentence and started with the ethics (p. 11): “Due to the characteristics of this study, ethical assessment was not required. The results from this systematic review and meta-analysis will be presented at international conferences related to this field and disseminated through peer-review publications”.

Discussion: The authors clearly stated the discussion of the study. Strengths and limitations of the study: The authors clearly described the strengths and limitations of the study.
Thank you.

References:
In the references part, I found that the authors used the correct format of the Vancouver style. The references that the authors cited in the text were published in the high standard journals in psychiatry field and had high relevance to the study which the authors interested in postpartum depression in women such as Archives of Women's Mental Health, the Lancet Psychiatry and Journal of Affective Disorders.
Thank you for your approval.

However, some references in the study are out of date such as reference number 6 (year 2000), 9 (year 2006), 12 (year 2007) and 14 (year 2008) because the references were published more than 10 years. There were assumed that the knowledge from the previous published articles is out of date. Please update your reference list.
Thank you for this comment. We have updated the reference list as follows:

- Ref. 6: Abdollahi, F., & Zarghami, M. (2018). Effect of postpartum depression on women's mental and physical health four years after childbirth. Eastern Mediterranean Health Journal, 24(10), 1002.

The reference number was changed from 6 to 9

- Ref 9: Kassebaum, N. J., Arora, M., Barber, R. M., Brown, J., Carter, A., Casey, D. C., … Zuhlke, L. J. (2016). Global, regional, and national disability-adjusted life-years (DALYs) for 315 diseases and injuries and healthy life expectancy (HALE), 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. The Lancet, 388(10053), 1603–1658. https://doi.org/10.1016/S0140-6736(16)31460-X

The reference number was changed from 9 to 12.

We added the following: The burden of disease in terms of years lived with disability attributable to major depression are increasing, ranking third in the world in high-income countries (p4):

- Ref: 12: Frieder, A., Fersh, M., Hainline, R., & Deligiannidis, K. M. (2019). Pharmacotherapy of postpartum depression: current approaches and novel drug development. CNS drugs, 33(3), 265-282.

The reference number was changed from 12 to 16.

- Ref 14: Lowndes, T. A., Egan, S. J., & McEvoy, P. M. (2019). Efficacy of brief guided self-help cognitive behavioral treatment for perfectionism in reducing perinatal depression and anxiety: a randomized controlled trial. Cognitive behaviour therapy, 48(2), 106-120.

The reference number was changed from 14 to 17

Moreover, in the reference number 27, I found new version of the book was published in the 3rd Edition in year 2017.
Thank you for this information. We updated the reference (p. 7, 13).

Ref. 27. Piantadosi S. Clinical Trials: A Methodologic Perspective [Internet]. 3rd. John Wiley & Sons; 2017.

The reference number was changed from 27 to 30.

In the reference number 28, I found new version of the book was published in the 3rd Edition in year 2003.
Thank you for this information. We updated the reference (p. 8, 9, 12). However, we did not find a new edition in 2003. We found that the last publication was in 2013.

Ref. 28. JL Fleiss, B Levin MP. Statistical methods for rates and proportions. 3rd. John Wiley & Sons; 2013.

The reference number was changed from 28 to 31.

VERSION 2 – REVIEW

REVIEWER	Elizabeth O'Connor Kaiser Permanente Center for Health Research
REVIEW RETURNED	10-Mar-2020

GENERAL COMMENTS	My comments have been adequately addressed.

REVIEWER	Bussara Sangsawang Srinakharinwirot University, Thailand
REVIEW RETURNED	03-Feb-2020

GENERAL COMMENTS	Thank you very much to give me for the good opportunity in revising this manuscript. I found it has very much improved. This original article presented a study protocol for a systematic review and meta-analysis of RCT studies to assess the effectiveness of psychological, psychoeducational and psychosocial interventions on the prevention of PPD. This manuscript can be published in the BMJ Open because the authors could revise their manuscript that followed the comments. Title: The authors revised the title. Abstract and key words: The authors briefly revised the abstract and added the new key

	words. Introduction: The authors revised and added more details following the comments. It is help to clarify the readers to understand in this section. Materials and methods: The authors revised and added details about the participants, outcomes, study design, search strategy, data extraction, and meta-analysis. Ethics and dissemination: The authors revised the ethics and dissemination. Discussion: Not revised the manuscript in this section.