PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Postnatal depression and intimate partner violence: A nationwide clinic-based cross-sectional study in Malaysia
AUTHORS	Ahmad, Noor Ani; Silim, Umi Adzlin; Rosman, Azriman; Mohamad, Majdah; Chan, Ying Ying; Mohd Kasim, Noraida; Yusof, Muslimah; Abdul Razak, Aznuddin; Omar, Maisarah; Abdul Aziz, Fazly Azry; Jamaluddin, Rasidah; Ismail, Fatanah; Ibrahim, Nurashikin; Aris, Tahir

VERSION 1 – REVIEW

REVIEWER	Abigail M Hatcher University of the Witwatersrand, South Africa
REVIEW RETURNED	24-Dec-2017

GENERAL COMMENTS	This manuscript uses well-conceived and implemented research strategies to explore intimate partner violence around the time of pregnancy and depression. While this topic has been explored elsewhere extensively, a robust population-based research design in Malaysia is novel. I have several suggestions for how to further strengthen the paper. Introduction 1. Please add citations to the two sentences on page 8 on lines 32-40 (ending “problems in later life”). 2. Please also add a citation to page 9, line 3 (ending “consequences”). Methods 3. For the WHO Multi-country study questionnaire, please also cite the original tool. 4. I valued the detail about the WHO Multi-country study questionnaire, but it may not be necessary to include each item given that the scale is accessible. Could consider cutting page 11, lines 3-42. 5. Kindly describe what is meant by “support during confinement”. This is not a term that I’ve seen used before, so it may be particular to the Malaysian setting. Results 6. The multivariable model requires work to speak to the broader IPV research field. I would consider making the primary predictor: Any physical and/or sexual violence. The authors can also control for psychological violence. An alternate analytical option would be to create a categorical variable of: physical only, sexual only, psych only, phys and sex, sex and psych, all three types of

	violence. 7. In the final model, theoretically important covariates must be included: marital status, education level. Discussion 8. On page 17, line 46, the authors bring up the idea of women being more open to disclosure. This line of reasoning is not supported by the data, since it is impossible to know whether women in Malaysia disclosed at higher rates than in Bangladesh, or if perhaps true violence rates are higher in Malaysia. A different type of study would be needed to assess disclosure patterns. 9. In limitations on page 19, also mention that the WHO tool, while used widely, may not be exhaustive in terms of types of psychological violence. Therefore, it may underestimate prevalence of this type of violence. 10. On page 20, line 24-30, please add citations of literature (preferably from the same region).

REVIEWER	Jane Fisher School of Public Health and Preventive Medicine, Monash University, Australia
REVIEW RETURNED	31-Dec-2017

GENERAL COMMENTS	Although it is now widely acknowledged that mental health problems among women who have recently given birth are multifactorially, predominantly socially, determined, recognition of the risk posed by violence perpetrated by an intimate partner has only occurred more recently. This study seeks to address knowledge gaps in Malaysia about the prevalence of experiences of intimate partner violence and its associations with 'postnatal depression' among women who have recently given birth. It makes a potentially important addition to the emerging evidence about the perinatal mental health of women in Malaysia. The paper describes an ambitious epidemiological study, but in my opinion crucial essential elements of the conceptual and contextual frameworks, methodological details, and consideration of limitations in the interpretation of findings are missing. Unless these are addressed, its claims to informing health service improvements, in particular screening among women who are pregnant or who have recently given birth, cannot be supported. • The Introduction provides quite a succinct account of risks for 'PND', but does not engage with a conceptual framework for these associations or any consideration of women's social position in the Malaysian cultural and national contexts. It is acknowledged that violence against women constitutes a major risk to their health, but it is not clear why it is claimed that IPV is a more serious public health problem when women become pregnant. This suggests, probably unintentionally that it is less of a problem among the majority of women who are not pregnant. • There is at least one inaccurate citation, reference #8 is not about 'determinants of PND in South Asia', but is a systematic review of the then available evidence from all the world's low and lower-middle income countries. • The Methods of a study need to be described with sufficient specificity and detail to permit replication, but this would not be possible from the account provided here. Methods are most clear when they include separately headed sub-sections describing the setting (health system and study-specific services); participants

	(inclusion and exclusion criteria); recruitment strategies; data sources, including their psychometric properties and whether or not they had been formally validated against a gold standard diagnostic interview for this nation and culture; procedure; data management and analysis and ethics. Some of this information is provided, some is duplicated (independent risk factors) and a lot is missing. • Specific additional information is required in particular about the Malaysian health care system and how it is accessed by women who are pregnant, including whether it is available to all women or whether women of certain ethnicities or residential status are not permitted to access it. More detail about the method of random selection of clinics is needed, including whether or not the selection was made by an independent statistician. While a sample size justification is provided, it is not clear what it is seeking to estimate: the prevalence of intimate partner violence or of postnatal depression. There is no description of the inclusion and exclusion criteria for participants. No account of the procedure is provided. This should describe in detail how participant safety and privacy were protected, how the content of the study was introduced to them and how much time there was between informing women about the study and making the decision about whether or not to participate and how data collectors were trained. • There is no account of the ethics of this research and how it was conducted ethically. It is essential that this is provided. • It is not appropriate to report population estimates in the results which should be confined to what was learnt in this study. • It is more respectful to use person-first language ... e.g. women who have recently given birth rather than 'postnatal women'. Similarly, people who contribute data to a study should be referred to as participants or, in this study, as women, but never as 'subjects' or 'cases'. This must be corrected throughout the paper. • Although it is claimed that the EPDS has been locally formally validated, no details about the gold-standard comparator or the psychometric properties, including how the local cut-off scores for clinically significant symptoms have been derived and verified in this context are provided. This is essential information which must be added. • It is not made clear whether it is lifetime or pregnancy or prior year experiences of violence that were assessed. This must be clarified and justified. • As clinically significant symptoms were ascertained with a self-report symptom checklist, and not a diagnostic measure, the author cannot claim to have established 'the prevalence of postnatal depression'. This must be corrected throughout the paper. • As this is a cross-sectional study it is not clear why 'defaulted follow-up at the clinic' is a reason for non-participation. This should be explained in the procedure. • There is only very limited engagement with why the prevalence established in this study so much lower than in prior research in Malaysia. This should be elaborated and include

	consideration of the limitations of the methods of the study, and context specific potential explanations. • The paper is essentially gender blind. It is essential in any consideration of gender-based violence to describe the social and cultural contexts in which women live. Malaysia is a conservative Islamic country in which women do not have the same access to rights experienced by women in other nations. There is a brief reference to 'cultural factors that view wife beating as a man's right to punish disobedient wife', and unquestioning use of terms like 'working mother', but these are not interrogated or elaborated. This needs to be addressed in a more substantial consideration of the structural and context-specific gender-based risks to women's health in Malaysia. • It is now acknowledged that 'postnatal depression' is an umbrella term rather than a distinct psychological state and that postnatal mental health problems including anxiety disorders, trauma and adjustment reactions are common, relevant, and contribute more to disease burden than depression. This limitation needs to be discussed.

VERSION 1 – AUTHOR RESPONSE

Manuscript ID: bmjopen-2017-020649

Editorial Comments and Requests:	**Authors responses'**
- Please revise the abstract so that it follows journal guidelines for research articles: http://bmjopen.bmj.com/pages/authors/#research_articles Please change the 'Discussion and Conclusion' heading to 'Conclusions'.	'Discussion and Conclusion' heading was changed to 'Conclusions' (Refer page 7 line 6)
- The description of the study design could be clearer in the title and abstract. Is it a cross-sectional study?	The study design, cross-sectional study, was inserted in the title of the manuscript (page 1 line 1-2 and page 6 line 1-2) and the abstract under methods section (page 6 line 13-14)
- Can you add the relevant ORs and CIs to the abstract?	Relevant ORs and CIs were added to the abstract (page 6 line 22,23, page 7 line 1-5)
- The quality of English needs improving in places. Please thoroughly proofread the paper. We recommend consulting a native English speaker (if possible).	The manuscript was proof-read by the in-house Editor
- Why were some of the questionnaires administered in	Two approaches were used in this study;

an interview? Have the measures been validated this way?	screening for postnatal depression using self-administered EPDS, followed by face-to-face interview by trained nurses using WHO Multi-country Study on Women's Health and Life Events Questionnaire. Both tools were validated locally as explained in methods section (page 12 line 1-8 and 15-18)
- Please provide information about the psychometric properties of the questionnaires in the methods section. In the strengths and limitations section (page 7) you say you are using locally validated tools but very little information is provided about this in the methods section.	Psychometric properties of both screening tool and questionnaire were provided in the methods section (page 12 line 1-8, and 15-18)

Reviewers' Comments to Author:

Reviewer: 1

Reviewer Name: Abigail M Hatcher

Institution and Country: University of the Witwatersrand, South Africa

Competing Interests: None declared

Introduction	
1. Please add citations to the two sentences on page 8 on lines 32-40 (ending "problems in later life").	Citation to the two sentences ending "problem in life" were added (page 8 line 20)
2. Please also add a citation to page 9, line 3 (ending "consequences").	Citation for sentence ending "consequences" was added (page 8 line 27)
Methods	
3. For the WHO Multi-country study questionnaire, please also cite the original tool.	Citation for the original WHO Multi-country Study on Women's Health and Life Events Questionnaire was added (page 12 line 6)
4. I valued the detail about the WHO Multi-country study	The detail on Multi-country Study on

questionnaire, but it may not be necessary to include each item given that the scale is accessible. Could consider cutting page 11, lines 3-42.	Women's Health and Life Events Questionnaire was cut.
5. Kindly describe what is meant by "support during confinement". This is not a term that I've seen used before, so it may be particular to the Malaysian setting.	The term support during confinement was described (page 9 line 18-19)
Results	
6. The multivariable model requires work to speak to the broader IPV research field. I would consider making the primary predictor: Any physical and/or sexual violence. The authors can also control for psychological violence. An alternate analytical option would be to create a categorical variable of: physical only, sexual only, psych only, phys and sex, sex and psych, all three types of violence.	Reanalysis using multivariable model with physical/or sexual violence as the primary predictor was done (page 14 line 22-23)
7. In the final model, theoretically important covariates must be included: marital status, education level.	Important covariates (marital status and education level) and variables with *p*-value of less than 0.25 were included in the final model (page 14 line 23-27).
Discussion	
8. On page 17, line 46, the authors bring up the idea of women being more open to disclosure. This line of reasoning is not supported by the data, since it is impossible to know whether women in Malaysia disclosed at higher rates than in Bangladesh, or if perhaps true violence rates are higher in Malaysia. A different type of study would be needed to assess disclosure patterns.	The reasoning was omitted.
9. In limitations on page 19, also mention that the WHO tool, while used widely, may not be exhaustive in terms of types of psychological violence. Therefore, it may underestimate prevalence of this type of violence.	Limitations of the WHO tool was mentioned (page 24 line 8-9)
10. On page 20, line 24-30, please add citations of literature (preferably from the same region).	Citation was added (page 24 line 23)

Reviewer: 2

Reviewer Name: Jane Fisher

Institution and Country: School of Public Health and Preventive Medicine, Monash University, Australia

Competing Interests: None declared

The Introduction provides quite a succinct account of risks for 'PND', but does not engage with a conceptual framework for these associations or any consideration of women's social position in the Malaysian cultural and national contexts.	Conceptual frame work used for this study was included (page 9 line 7-16)
It is acknowledged that violence against women constitutes a major risk to their health, but it is not clear why it is claimed that IPV is a more serious public health problem when women become pregnant. This suggests, probably unintentionally that it is less of a problem among the majority of women who are not pregnant.	We have removed the statement.
• There is at least one inaccurate citation, reference #8 is not about 'determinants of PND in South Asia', but is a systematic review of the then available evidence from all the world's low and lower-middle income countries.	The inaccurate citation was amended ([page 9, line 1). Other citations have also been rechecked.
• The Methods of a study need to be described with sufficient specificity and detail to permit replication, but this would not be possible from the account provided here. Methods are most clear when they include separately headed sub-sections describing the setting (health system and study-specific services); participants (inclusion and exclusion criteria); recruitment strategies; data sources, including their psychometric properties and whether or not they had been formally validated against a gold standard diagnostic interview for this nation and culture; procedure; data management and analysis and ethics. Some of this information is provided, some is duplicated (independent risk factors) and a lot is missing.	Methods section has been amended according to the various subheading; study design, setting, participants, recruitment strategies, variables with psychometric properties of the validated tool and questionnaire, sample size, data management and analysis, and ethics (page 10 line 3, page 15 line 14)
• Specific additional information is required in particular	Information on the Malaysian healthcare

about the Malaysian health care system and how it is accessed by women who are pregnant, including whether it is available to all women or whether women of certain ethnicities or residential status are not permitted to access it.	system was included (page 10, line 21-25)
More detail about the method of random selection of clinics is needed, including whether or not the selection was made by an independent statistician.	Detail sampling design and recruitment strategies were added (page 10 line 22 to page 11 line 22)
While a sample size justification is provided, it is not clear what it is seeking to estimate: the prevalence of intimate partner violence or of postnatal depression.	Sample size justification was added (page 14 line 1-6)
There is no description of the inclusion and exclusion criteria for participants.	Inclusion and exclusion criteria of the participants were included (page 10 line 16-19)
No account of the procedure is provided.	Recruitment process was added (page 10 line 22 to page 11 line 22)
This should describe in detail how participant safety and privacy were protected, how the content of the study was introduced to them and how much time there was between informing women about the study and making the decision about whether or not to participate and	Description on participant safety and privacy was included in the text (page 11 line 5-13)
how data collectors were trained.	Training of data collectors was added (page 11 line 15-18)
• There is no account of the ethics of this research and how it was conducted ethically. It is essential that this is provided.	Section on ethics was included (page 11 line 9-14)

• It is not appropriate to report population estimates in the results which should be confined to what was learnt in this study.	The phrase was removed.
• It is more respectful to use person-first language ... e.g. women who have recently given birth rather than 'postnatal women'. Similarly, people who contribute data to a study should be referred to as participants or, in this study, as women, but never as 'subjects' or 'cases'. This must be corrected throughout the paper.	Person-first language was used and term "subjects" was dropped.
• Although it is claimed that the EPDS has been locally formally validated, no details about the gold-standard comparator or the psychometric properties, including how the local cut-off scores for clinically significant symptoms have been derived and verified in this context are provided. This is essential information which must be added.	Psychometric properties of the EPDS and gold-standard comparator of the validation study were included (page 11 line 1-8)
• It is not made clear whether it is lifetime or pregnancy or prior year experiences of violence that were assessed. This must be clarified and justified.	The term ever experienced IPV was used to indicate lifetime (page 12 line 14-15)
• As clinically significant symptoms were ascertained with a self-report symptom checklist, and not a diagnostic measure, the author cannot claim to have established 'the prevalence of postnatal depression'. This must be corrected throughout the paper.	The term postnatal depression was changed to probable PND throughout the paper
• As this is a cross-sectional study it is not clear why 'defaulted follow-up at the clinic' is a reason for non-participation. This should be explained in the procedure.	The term was amended into defaulted appointment date. Detail recruitment strategies was explained (page 15 line 19)

• There is only very limited engagement with why the prevalence established in this study so much lower than in prior research in Malaysia. This should be elaborated and include consideration of the limitations of the methods of the study, and context specific potential explanations.	Explanation on other possible reasons for lower prevalence was included (page 21 line 22-26)
• The paper is essentially gender blind. It is essential in any consideration of gender-based violence to describe the social and cultural contexts in which women live. Malaysia is a conservative Islamic country in which women do not have the same access to rights experienced by women in other nations. There is a brief reference to 'cultural factors that view wife beating as a man's right to punish disobedient wife', and unquestioning use of terms like 'working mother', but these are not interrogated or elaborated. This needs to be addressed in a more substantial consideration of the structural and context-specific gender-based risks to women's health in Malaysia.	Social and cultural context of women in Malaysia were added in (page 23 line 1-16)

• It is now acknowledged that ‘postnatal depression’ is an umbrella term rather than a distinct psychological state and that postnatal mental health problems including anxiety disorders, trauma and adjustment reactions are common, relevant, and contribute more to disease burden than depression. This limitation needs to be discussed.	Limitation of the term used was discussed (page 24 line 4-8)

VERSION 2 – REVIEW

REVIEWER	Abigail M Hatcher University of the Witwatersrand, South Africa
REVIEW RETURNED	20-Feb-2018

GENERAL COMMENTS	The authors have responded thoroughly to the comments and the paper is ready for publication.

VERSION 2 – AUTHOR RESPONSE

The conclusions section of the abstract has been improved.
The manuscript has been copy-edited by The American Journal Experts; Certificate Verification Key: 2762-7EE2-0AFB-8B8D-9CD9 (certificate attached).
Statements on the patient and public involvement were added under methods section (page 12)