

## PEER REVIEW HISTORY

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### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Factors associated with pregnancy-related anxiety in Tanzanian Women: a cross sectional study
<b>AUTHORS</b>	Wall, Vanessa; Premji, Shahirose; Letourneau, Nicole; McCaffrey, Graham; Nyanza, Elias

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Dr. Bathsheba Mahenge University of Dodoma
<b>REVIEW RETURNED</b>	31-Oct-2017

<b>GENERAL COMMENTS</b>	<p>The paper is well written but has great limitations as stated by the authors that all the tools used in this study were not validated for the Tanzanian population. This brings a lot of questions in interpretation of results, how reliable are the results?</p> <p>I expected the authors to at least have one paragraph in the discussion comparing if results from other LMIC countries who have used similar tools.</p> <p>What happened to women who screened positive for depression and anxiety?</p>
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<b>REVIEWER</b>	Vivette Glover Imperial College London
<b>REVIEW RETURNED</b>	06-Nov-2017

<b>GENERAL COMMENTS</b>	<p>This paper addresses an important question but the methods used limit its ability to answer it. We need to know more about pregnancy related anxiety in low income countries and what can cause it. But there can be many risk and protective factors that were not studied here, and that severely limits its interest. What is the rate of maternal and infant mortality? Were the women worried by this? What was the overall infectious load? Was religious belief protective? The PRA-Q and the EPDS were designed in Europe and may not be suitable in Tanzania. This is very important and not adequately discussed. For example, did the women understand the EPDS question about "things getting on top of me"?</p> <p>Other points.</p> <p>p4. Introduction. PRA prevalence estimates are given although in the Discussion it is stated that there are no established cut-offs and no diagnostic criteria.</p> <p>p12. Table 2.No EPDS data given. It is stated that 13 was used as a cut-off although many studies have shown that this may not be suitable in countries like Tanzania.</p> <p>p13.</p> <p>Do full EPDS and recalculated EPDS really give identical rs values?</p>
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p14. second para. How is high anxiety defined? Do PRA and PRA-Q always mean the same in this paper?
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### VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Comment: The paper is well written but has great limitations as stated by the authors that all the tools used in this study were not validated for the Tanzanian population. This brings a lot of questions in interpretation of results, how reliable are the results? Response: We have therefore removed the sentence “It should be acknowledged that most of the tools used in this study have been tested on the population of interest.” as it is somewhat misleading. For example, The EPDS is widely accepted for global populations with translation in several language (Cox, Holden, & Sagvosky, 1987; Navarro et al., 2007; Parsons, Young, Rochat, Kringelbach, & Stein, 2012; Tsai et al., 2013). It has also been tested in African countries and the Swahili version has been used previously by research team members. Although the pregnancy-related anxiety questionnaire (PRA-Q) has not been validated, qualitative studies conducted in low- and middle-income countries (e.g., Ghana, Uganda, South Africa, Zambia, and Malawi) has identified dimensions that are measured in the PRA-Q (e.g., fetal health, mother’s well-being, parenting and care for child) (Bayrampour, Ali, McNeil, Benzies, MacQueen, & Tough, 2016). We have acknowledged that our findings should be interpreted with caution given the limitations of the tool used (e.g., no established normative reference to indicate “high risk”).

Comment: I expected the authors to at least have one paragraph in the discussion comparing if results from other LMIC countries who have used similar tools. Response: please see the paragraph added on p17-18

Comment: What happened to women who screened positive for depression and anxiety? Response: In the parent study, women who expressed stress, depression, or suicidal ideation were counseled and referred to appropriate resources based on a counselor’s appraisal. They were given the option to withdrawal from the study. The initial counseling/referral fee was paid by study regardless of the woman’s choice to continue or withdrawal from the study.

Reviewer: 2

Comment: This paper addresses an important question but the methods used limit its ability to answer it. We need to know more about pregnancy related anxiety in low income countries and what can cause it. But there can be many risk and protective factors that were not studied here, and that severely limits its interest. Response: We explained in the limitation section that we conducted secondary analysis thus are limited in terms of the variables we could examine. We have added a bullet point in the strengths and limitations after the abstract.

Comment: What is the rate of maternal and infant mortality? Response: A discussion of this was added to p17.

Comment: Were the women worried by this? What was the overall infectious load? Was religious belief protective? Response: This particular study did not examine women’s perspective of PRA; however another qualitative study recruiting women from the larger study did reveal that women’s PRA was related to the maternal and infant mortality rates. It would be beneficial to examine these variables. As explained earlier, we conducted secondary analysis thus were limited by variables included in the parent study. No research was found during the review of literature regarding religious affiliations and PRA.

Comment: The PRA-Q and the EPDS were designed in Europe and may not be suitable in Tanzania. This is very important and not adequately discussed. For example, did the women understand the EPDS question about "things getting on top of me"? Response: The EPDS has been used and tested in populations in various parts of Africa (Ethiopia, Nigeria, Sierra Leon, Zimbabwe) it has also been tested in a variety of languages. The Swahili versions have been used in a previous study in Tanzania at the Aga Khan University. This was added to p9. Although the pregnancy-related anxiety questionnaire (PRA-Q) has not been validated, qualitative studies conducted in low- and middle-income countries (e.g., Ghana, Uganda, South Africa, Zambia, and Malawi) has identified dimensions that are measured in the PRA-Q (e.g., fetal health, mother's well-being, parenting and care for child) (Bayrampour, Ali, McNeil, Benzies, MacQueen, & Tough, 2016). We have acknowledged that our findings should be interpreted with caution given the limitations of the tool used (e.g., no established normative reference to indicate "high risk").

Other points.

Comment: p4. Introduction. PRA prevalence estimates are given although in the Discussion it is stated that there are no established cut-offs and no diagnostic criteria. Response: Please see p4. Qualifiers have been added to the paragraph to clarify this discrepancy.

Comment: p12. Table 2. No EPDS data given. It is stated that 13 was used as a cut-off although many studies have shown that this may not be suitable in countries like Tanzania. Response: EPDS data have been added to table 2 on p.13. Although a range of cut-offs have been reported, we based our decision on "general consensus for EPDS cut-offs is 13 or more." (Parsons, Young, Rochat, Kringelbach, & Stein, 2011, p 63) as it "yields greater specificity" (Tsai et al., 2013) and more studies in low- and middle-income countries have used the higher cut-off (Parsons et al., 2011; Tsai et al., 2013).

Comment: p13. Do full EPDS and recalculated EPDS really give identical rs values? Response: Yes. To ensure there was no mistake we repeated this bivariate analysis and the rs value is .511 for both the full EPDS and recalculated EPDS.

Comment: p14. second para. How is high anxiety defined? Response: High anxiety is defined in accordance with the criteria created by Fairlie, Gillman, and Rich-Edwards (2009) (a response of 3 or greater on 3 or more questions) which is explained in the methods section on p13.

Comment: Do PRA and PRA-Q always mean the same in this paper? Response: No, PRA refers to the phenomenon of pregnancy-related anxiety; PRA-Q refers specifically to the Pregnancy-Related Anxiety Questionnaire.

## References

Bayrampour, H., Ali, E., McNeil, D. A., Benzies, K., MacQueen, G., & Tough, S. (2016). Pregnancy-related anxiety: A concept analysis. *International Journal of Nursing Studies*, 55, 115-130. doi:10.1016/j.ijnurstu.2015.10.023

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Fairlie, T. G., Gillman, M. W., & Rich-Edwards, J. (2009). High Pregnancy-Related Anxiety and Prenatal Depressive Symptoms as Predictors of Intention to Breastfeed and Breastfeeding Initiation. *Journal of Women's Health* (15409996), 18(7), 945-953. doi:10.1089/jwh.2008.0998

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Parsons, C. E., Young, K. S., Rochat, T. J., Kringelbach, M. L., & Stein, A. (2012). Postnatal depression and its effects on child development: A review of evidence from low- and middle-income countries. *British Medical Bulletin*, 101, 57-79. doi: 10.1093/bmb/ldr047

Tsai, A. C., Scott, J. A., Hung, K. J., Zhu, J. Q., Mathews, L. T., Psaros, C., & Tomlinson, M. (2013). Reliability and validity of instruments for assessing perinatal depression in African settings: Systematic review and meta-analysis. *PLoS ONE*, 8(12), e.82521. doi: 10.1371/journal.pone.0082521

**VERSION 2 – REVIEW**

<b>REVIEWER</b>	Vivette Glover Imperial College London UK
<b>REVIEW RETURNED</b>	29-Mar-2018
<b>GENERAL COMMENTS</b>	Criticisms appropriately addressed