Reviewer's report

Title: A qualitative study on barriers of managing anaemia during pregnancy in Public Health Centres: perceptions of Indonesian nurse-midwives.

Version: 4 Date: 29 December 2014

Reviewer: Andrea Solnes Miltenburg

Reviewer's report:

I would like to congratulate the authors on this important research where the voices of health workers are heard. They are often described but not enough consulted. With regards to antenatal care we know many women do not receive the necessary elements of ANC for reasons such as 1) human resources, 2) lack of materials and equipments and 3) lack of perceived need by health workers or lack of time. In particular investigations (such as Hb testing) and ANC education are frequently not performed. This article aims to identify what health workers perceptions are regarding their ability to provide ANC and manage anemia. The background should be more concise regarding the focus of the research and why this is relevant in the given context. It needs to be clear if it is about prevention of anemia or management of anemia once it is detected. The literature used is focussed on the context which is very good but misses some important literature on quality of ANC.

Qualitative research is an excellent way to add more depth to existing quantitative data (such as quantitative information on how many pregnant women received certain care provision). This information is missing in the article. We only know it is ‘insufficiently implemented’. However what and how remains vague. Therefore the whole line of the article is difficult to follow. Some excellent points are made in the discussion. However, care should be taken that it is the perception of the health worker on the situation (which is also the strength of the article!) and not a given fact. It would be valuable to relate this to literature on perceptions of other stakeholders on this problem. Then finally the discussion reads as if it is argumented towards a validation of a planned implementation of an intervention. The pillars come somewhat out of the nowhere. I would rephrase this towards a need for more research or recommendations.

Major compulsory revisions

- There are different elements to antenatal care regarding anemia. One is the ability to detect anemia and the other is to manage it in case it is detected (depending on the level of care Detecting with Hb tests during pregnancy or during delivery requires different skills and resources than managing it. Another element is to prevent anemia and to ensure adequate food intake and encourage intake of iron tablets. Again, different from detecting or managing anemia. Although the results pay attention to both health education and the ability to test Hb it is not discussed if health workers feel they have the
general knowledge for detecting anemia (with or without lab, focusing on symptoms) or if they know what to do to manage it if they have detected anemia (at which level of Hb, referral, need for transfusion?). It is unclear if there was attention for this in the interview guide. Throughout the results and discussion it seems as if the focus was more on the role of the midwife during antenatal care with regards to prevention of anemia. To start I would recommend to add the ‘technical procedure’ to which is referred several times in the text. Either in a box or in the text. This might make it more clear what the focus of the research was.

- It would be interesting to add data (if available) on the number of women who have received iron tablets in pregnancy and those with severe anemia how many received the food supplements (which according to the introduction is part of the strategy?). It is only mentioned that ‘implementation is insufficient’ but not clear what exactly. Or is this just based on the remaining high percentage of anemia? Or on the number of deaths or near miss due to anemia? In other words what is the rational for this study?

- Discussion: I would rephrase the main findings in the form that ‘according to the perceptions of health workers there are three factors which hinder adequate implementation/management of anemia… etc’.

Minor compulsory revisions

- Row 66-73: According to the 2004 DHS of Indonesia one time ANC visit and 4 time ANC visits had respectively a coverage of 94.9% and 81.0% which is quite high. I think it is important to mention this in light of the comments in this paragraph and to set the context. Assuming that since the DHS 2004 the figures have not much changed women do seem to go at least once to ANC, despite the conditions described in this paragraph.

- Row 85: I would suggest to leave out the word ‘simple’ as it is hardly simple in an environment where the necessary supplies (reagens, test strips etc) are not always available. It makes the sentence derogative.

- Table1: I don't feel this needs to be in the manuscript as the themes are already mentioned in the text. Also it gives more questions than answers.

- Discretionary revisions

- Point after the reference (example row 43)

- Row 66 starts with failure to implement maternal healthcare, row 67 speaks about women, row74 returns to the health provider. I would suggest to let paragraph from row 74 go before the part about women not attending care and to pay attention to the linking words and if they are adequate ‘however, at the same time’ and so on.

Level of interest: An article of importance in its field

Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests