Reviewer’s report

Title: Implications of male circumcision for women in Papua New Guinea: a transformational grounded theory study.

Version: 0 Date: 20 Feb 2017

Reviewer: Colleen Fisher

Reviewer's report:

Thank you for the opportunity to review the manuscript. The manuscript is well written and interesting with the issue of HIV prevention being important in the context of PNG.

I raise the following issues for modification by the authors to improve and clarify aspects of the manuscript to enable it to potentially be publication standard.

Background:

As BMC Women's Health attracts an international readership, it would be useful to add some detail at line 83 where it is noted that the 'social and educational status of many women in PNG' is low. How does it relate to similarly developed nations? Other nations in the region? Etc. There is some description of the setting (lines 99-106) but no description/detail of the status of women in the country is provided at any point, despite it being mentioned throughout (including in the findings of the manuscript where education and ability to influence decisions are discussed). Having specific information about the status of women would contextualise these findings for the reader.

A transformational grounded theory study design is appropriate for the research, but I have the following comments:

The process of sampling and data analysis is not clearly described in the manuscript. It is noted that in Phase 1 existing qualitative data were theoretically sampled. What were the dimensions that were used to theoretically sample from the data? How much data were in this sample? These data were then analysed (line 116). It is then noted, however, (line 118) that "Chunks of data identified during this phase were then analysed by 64 female co-researchers in seven interpretive focus groups". Description of how these 'chunks of data' were identified should be included? The use of the term 'analysed' (line 118) is confusing given that the process of
'interpretive focus groups has not previously been described. It would have been useful to provide a brief discussion of this and also refer the reader to the publication of the authors related specifically to the describing 'interpretive focus groups' undertaken for this particular study. It is also unclear who participated in the "11 semi-structured interviews" (line 121). What data are presented in the manuscript? Is it the analysis undertaken in the interpretive focus groups and the 11 semi-structured interviews? Or does it also include the analysis of the original sample of data from the broader study (as described in lines 115-116). Or does it relate to the 11 semi-structured interviews described at line 121? Or Something else? What was discussed in these interviews?

Under the heading "Sample" (line 126-127) it is unclear where this data were sampled from. Is it the same as that described at lines 113-114? If so, then the description of the samples are very different (861 males and 519 females compared to 9 semi structured interviews and 2 focus groups). Clarity and required. In phase 2 (line 128) it is noted that 66 women and 1 man co-generated primary data which were "theoretically samples at two of the four original sites". Which sites are the 'original sites' - those described at line 113? 119? Other? Along what characteristics were the participants 'theoretically sampled'?

A very brief description of the data analysis is provided. Although it is well known that data analysis for grounded theory utilised 3 levels of coding, memoing and constant comparative analysis, there is no description of how this was operationalised for this particular study. There is no description provided of how the data from the interpretive focus group were analysed (there is description that they were transcribed "line 123) but the reader is not provided with any information on what analysis was undertaken on these transcripts. How were the 'storyboards' analysed? Who undertook the analysis? Was it the same analysts across all phases?

Why was the Kelly et al article chosen to be included? Rationale should be provided.

It is apparent that data were collected in the local language, but were they also collected in English? How were the translations undertaken and what processes were implemented to ensure that the context and cultural meaning were retained in the translation? Who undertook the translation? Who facilitated the interpretive focus group?

Line 307 notes that a participant in an interpretive focus group had an agricultural qualification and that "This wamn was deferred to by other women during the group". What does this mean for the integrity of the data within that group - was 'group think' occurring with the other women deferring to her?
What was the involvement of "one man" (line 128). What primary data is being referred to here? It is noted that the data were 'co-generated'. Does that mean he was also involved in an interpretive focus group? Or was he interviewed? Clarity required.

In sum, the sections related to methodology require re-writing to provide clarity.

The manuscript reports interesting findings, but at many times I was wanting evidence, by way of verbatim quotes, to support what was being asserted. Without the quotes it is difficult to understand whether what is being presented are findings of this research, or what is known in the literature. If the former, quotes are required, if the latter, references are required. See for example:

Lines 175 – 184

Lines 186 – 193

Lines 221 - 231 only includes on very brief quote in the paragraph with the quote at lines 233 - 236 not really reflecting the text preceding it

Lines 250-254

Line 294-295

Line 299-311

Lines 313-331 - just one quote of substance is provided for an entire category. Is this sufficient?

Lines 356-367 (just one quote after line 367). Is this sufficient?

Lines 373 – 379

Lines 390-391
It would be useful to provide a description of what the codes given to participants stand for (eg, DWU SSI 20; NBPOL IFG 2; PAU 221 4).

At various stages in the findings, the category 'Acting on Choices (as noted in the model) is referred to as 'Acting on Options''

Line 408 - a category "Increasing Choices" is mentioned, yet there is no category labelled this in the model

There is a lot of repetition throughout. The following are examples, but a full edit is required to ensure repetition is removed:

Line 213 - repetition from line 189

Line 256 - repetition from previous paragraph

Line 263-268

Lines 292-293 - repetition from 244

Line 333 - repetition from 301

Lines 399-402 and "stopped" by whom?

I found the section that brings into discussion the social determinants of health to be very superficial particularly that linking the oppression, to systemic power, discrimination and structural power. (For example what is meant by "The theoretical concept of the social determinant of Peace/Oppression)? And what "areas for action (line 438) are highlighted? There are some very large statements made about social structure and social organisation in a country based on a small qualitative study, specifically researching male circumcision. Critical theory and social determinants of health are very large bodies of literature (very theoretical in the case of the former) and a deeper engagement is required to give them justice and to provide a well considered argument for the linking of the various power structures described.
It is noted that "Peace is one of the conditions of health originally identified in the Ottawa Charter……". Peace is actually referred to as a 'pre-requisite for health'.

Is the social determinants of health a public health theory? (line 428)

Miscellaneous issues

Line 282 - NBPOL is written, but there is not explanation of what this acronym means

Line 295 - what is a "B category"?

What is meant by "….own status separate from husband, resources, income etc)…. (line 365)

Line 384 - blame their mothers for what? What kind of 'negative consequences' are being referred? As a result of what? Needs unpacking.

Lines 394-396 makes a grant claim about the impact of violence influencing "every decision a woman makes". What is the evidence for this? (if this is from the data for the study, it needs verbatim quotes as evidence)

Line 417 - page number required for a direct quote
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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Not relevant to this manuscript

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