Reviewer's report

Title: An assessment of the likely acceptability of vaginal microbicide for HIV prevention among women in rural Ghana

Version: 1 Date: 5 April 2012

Reviewer: Elizabeth Greene

Reviewer's report:

The research question is valid and study design seems solid, and there are some interesting and important findings that could contribute to the field. However, I would suggest more reference to current literature and research, some re-organization of the methods and results, and more development of the discussion and conclusion sections before publication.

Major Compulsory Revisions

1. The stated research question posed by authors is the perceived acceptability of microbicides to women in rural Ghana; however, the results discuss findings from FGDs among men. I would suggest that male FGD findings not be included in this paper. While interesting to compare the acceptability of a potential microbicide between men and women, that is not the stated purpose of this study and the male FGDs are superfluous to the research question.

2. Throughout the manuscript, microbicides are referred to as if an approved product is imminent. Given the results of studies more recent than CAPRISA, this may not be the case. The field is changing rapidly and the results are very mixed. I would suggest rephrasing language throughout the paper with regard to the potential for an approved microbicide product to more realistically reflect the findings of current microbicides studies. Additionally, I would suggest adding reference to other studies beyond CAPRISA. For example, the Tenofovir gel arm of the VOICE study was recently discontinued due to interim findings of no effect. The authors should be careful not to overstate the potential for an approved product soon or be overly optimistic about current study results.

3. Introduction section, general: The authors make a good argument as to the why microbicides would be useful to a high-risk population that has experienced very high prevalence rates in Ghana; however, there is no description or mention as to why this study is therefore targeting rural women, over half of whom are married. I would suggest adding some description of why rural women in particular are at risk and may find a microbicide useful.

4. Methodology section, Quantitative Survey: As the study is exploring participants’ purely hypothetical acceptance of a potential microbicide, and as participants have never had experience using a microbicide, much of their understanding of microbicides would be based upon the description given to them by the research assistants conducting the questionnaire. Thus much of
their judgment of acceptability of microbicides may be based upon this
description as well (and could be biased by this description). I would therefore
suggest including a brief description of how microbicides were presented and
described to participants by the research assistants before participants answered
the survey.

5. Methodology section, qualitative methods, first sentence: You say you
explored thematic areas in a “follow-up survey,” but then go on to describe
FGDs, which are not surveys. I would suggest rewording this section to more
accurately describe FGDs.

6. Results section, general comment: The organization of the results section
could be strengthened. The title of the first section “Awareness and acceptability”
is redundant with the next section entitled “Acceptability.” Consider revising the
title of the first section, and reorganizing both sections to provide a clearer flow to
the results. For example, the results of the univariate and multivariate analyses
would make more sense presented towards the beginning of the results section,
and could then be broken-down and elaborated on throughout the results
section.

7. Acceptability section, fifth paragraph: Please see comment #1 above –
suggest removing any reference to male focus group discussions.

8. Discussion section, 3rd paragraph: The discussion about the link between
religious persuasion and microbicide acceptability seems out of place. Religious
persuasion is not mentioned at all as a finding in the results section, with the
exception of a brief mention of it as an outcome of the univariate analysis. It is
not clear from the results what the finding is, i.e. are Christian women more likely
to accept it, as compared to non-religious women, or Muslim women? Was this
discussed at all in the FGDs, and if so, did that discussion add any depth to the
findings from the survey? Religious persuasion should either be added to the
results section, or removed from the discussion section.

9. Discussion section, 4th paragraph: The discussion on how the finding related
to the need for partner acceptability and covert use tie in with the current
literature is weak. There are several studies that examine this issue, yet the only
literature cited are studies that are very old. I would suggest looking for more
recent literature and rewriting this section to reflect a more robust discussion of
how these findings relate to others, some of which also take place in
Sub-Saharan African settings. Some suggestions are: Greene et al. 2010;
Montgomery et al. 2008; Salter et al. 2008; Tolley et al. 2006; Woodsong and
Alleman, 2008.

10. Discussion section, paragraphs 6 and 7: The discussion on microbicide
acceptability and sexual pleasure could be better developed. The authors could
tie the discussion to more recent literature on the topic, as some studies have
found that microbicide use has actually increased sexual pleasure. The main
point that sexual pleasure should be considered in developing a microbicide,
especially in West African or Sub-Saharan African cultures, is important, but the
discussion could be more robust.

11. Discussion section: General comment: The discussion section is lacking a discussion of the limitations of this study. Please include discussion of limitations, which may include among other things, the quickly changing research findings on microbicides, the fact that the participants have never used a microbicide and thus their opinions could have been biased by the way microbicides were presented to them by the researchers, and the population of rural women which may not be representative of more high-risk women in urban areas.

Minor Essential Revisions

12. Abstract, first sentence of Methods section: The sentence is structured to imply that the focus group discussions were a cross-sectional survey tool; FGD’s are a separate qualitative methodology. The study employs a mixed-method design, using a cross-sectional survey and FGDs to further understand the findings. I would advise rewriting the first sentence to better describe the methodology used.

13. Second paragraph of Introduction, 3rd sentence: There is a period missing at the end of this sentence.

14. Third paragraph, Introduction, last sentence: Add “At the time of writing” or something similar before beginning the sentence. Microbicide research is changing rapidly and statements like these may likely be outdated by the time of publication.

15. Fifth paragraph of Introduction, first sentence: Can you provide any citations to back-up this claim?

16. Throughout the paper, the grammatical use of “microbicide” is often incorrect. It should be referred to as “a microbicide” or “microbicides.”

17. Study setting section: Should be moved under the “Methodology” section.

18. First paragraph of Methodology section: Again, this description does not adequately summarize the study design (see comment #12 above). Also, move the description of the two antenatal facilities to the “Study setting” section.

19. Awareness and Acceptability section, last paragraph: The authors state that women prefer a microbicide that is whitish and perfumed; please provide a description of the other formulations of a microbicide that were presented to women as other options in addition to this. In other words, women preferred this formulation as compared to…what other formulation(s)?

20. Acceptability section, second-to-last paragraph: The authors state that women were concerned about the gel’s effect on sexual pleasure, but do not elaborate. This is a major point in the discussion, and as such, would be bolstered with additional specific information as to how women felt with regard to this topic. If there are any FGD quotes related to this, please include one or two illustrative examples.
21. Discussion section, 5th paragraph: “Additionally consistent microbicide could be…” is grammatically incorrect. Suggested revision: “Additionally, consistent microbicide use could be…”

Discretionary Revisions

22. Abstract, fourth sentence of results: Fix grammar errors: “will” should be “would” and microbicide should be plural (microbicides).

23. Abstract conclusion: This statement could be better-worded. What interventions? (All are only theoretical interventions at this point).

24. Second paragraph of Introduction, 4th sentence: “pertains in” is not correct use of this term and should be removed.

25. Third paragraph of introduction, 4th sentence: Run-on sentence. Replace an “and” with a comma, or re-word the last phrase.

26. Sixth paragraph, Introduction, fifth sentence: Stating that Ghana is likely to deploy a microbicide once one is approved seems subjective. Suggest removing, providing a citation, or re-wording.

27. Last sentence, Study setting section: Consider defining “lorry park” and rewording the last part of the sentence as “24 hours in the day...” sounds colloquial.

28. Results section, first paragraph: This paragraph provides a description of the study population; consider moving it to the methodology section. As well, consider providing the demographic data on the study population in a table format which would provide the reader with a more complete and interpretable picture of the population, and reduce the number of words in the text.

29. General comment: In multiple places throughout the text, numbers and percentages that are the first word of a sentence are presented as a number rather than spelled out. These should be spelled-out (e.g. 58% should read “Fifty-eight percent”).

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.