Reviewer's report

Title: Evaluation of a communication strategy to increase awareness and the appropriate use of non-occupational post-exposure prophylaxis (nPEP) for HIV prevention

Version: 1 Date: 6 August 2012

Reviewer: Douglas Krakower

Reviewer's report:

This manuscript reports on the findings of a multimodal communication strategy in Western Australia that aims to increase awareness of nPEP among gay men and optimize the delivery of nPEP in clinical settings.

It was a pleasure to read this manuscript, and I think the study advances the field with respect to nPEP delivery for at-risk gay men in a resource-rich setting. The strength of the study includes the multifaceted communication strategy and several important outcomes that were assessed before and after the program was implemented, as it offers an example of a program that could be realistically replicated in similar communities in Australia and beyond.

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

1. The decrease in nPEP awareness among the key population (gay men) in the most recent period raise some questions about the durability of the strategy being studied, and additional thoughts about why this might be (aside from the possibility that more of the at-risk population were young, which did not appear to be supported with specific data from this study or other, prior studies), would be helpful if others are to replicate the intervention.

2. Another limitation was the small number of providers involved (and low response rate to the provider survey performed), as it may be challenging to replicate the intervention in larger communities with a greater population of relevant providers, so this should be made even more explicit in the discussion as well; the brief mention of this issue was helpful but should be expanded given that some of the most important outcomes studies herein relate to clinical encounters with providers (e.g., HIV testing, appropriate use of nPEP, etc.).

3. Finally, there is a limitation in the study design itself (ie, a pre/post design) as there could be significant confounders at hand that underlie the observed changes that do not relate to the intervention itself; this should also be made explicit in the discussion so that readers will bring an appropriate amount of “skepticism” to the results as they consider the potential impact of the program itself, particularly as others may consider replicating the program elsewhere.

4. It is standard practice to obtain ethics board approval for any research in my
experience, even for quality improvement projects that are analyzed after the data are collected, but I would defer to the journal editors on how they would approach this.

Please see the following for detailed suggestions:

- Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

Title. Just a suggestion, but I wonder if a stronger title might suggest the directional outcome of the study, eg, Improved utilization of non-occupational post-exposure prophylaxis after introduction of a multimodal communication campaign: an observational study.

Abstract.

Background: “Groups at risk of HIV infection” – should this be “at risk for HIV acquisition”? Also, might be helpful to revise this sentence to state “…other populations at risk for HIV acquisition…” as "gay men is a risk group.

AIM: as this is in observational study, would be more accurate to state that the study is observing changes in the key outcomes before/after the intervention, as “led to” implies causation that is hard to establish with this design. Would change the wording to remove any firm conclusion about causation.

Methods:

1. Consider changing the terms immediate and ultimate to short-term and long-term as I was not sure what ultimate was meant to convey. If these terms are standard for program logic then would be reasonable to keep as-is, but I worry that many readers will find them unusual (particularly the term "ultimate") as they try to gauge the time-frame for the outcomes of the study prior to viewing the Figures and Table.

2. The term “Sexuality sensitive doctors” was novel to me and might be good to define right away at first mention.

Results: I noted p=.000; I have usually seen this as p.0001 but would defer to the editors. Otherwise very clear and interesting results.

Conclusions: Very interesting.

Text:

Background:

1. Consider defining “sexual health physicians” with its first mention, as I was not clear on who this key group of providers might represent.

2. Consider clarifying if the hotline was for at-risk persons, healthcare professionals, or both.

Methods:
1. I was not sure what was meant by the term “scope the evaluation” in line 1, so consider alternative choice of words.

2. Consider removing references to “asterisked” outcomes in the text so that readers do not need to more back and forth between text and figures.

3. At first mention of STI would define this term.

4. For the outcome of “number of positive HIV test results,” consider changing this to mention the proportion of positive test results, as the number of persons tested could change pre/post intervention (and did as per Table 1) so the proportion seems to be the most important variable.

5. Same idea as 4 above when analyzing the clients who were tested at each of the notable follow up times (4-6 weeks, etc.): consider mentioning proportions in lieu of numbers in the text.

6. “No unpublished, raw data…”. Consider removing this sentence. I had to read this sentence a few times to understand what was meant. Is it necessary to include this statement or could you delete?

Results:

1. Paragraph 3. In the section Visitors to online nPEP resources, consider clarifying if this was created for at-risk persons or providers (I assume the former given the number of website hits), or both.

2. Paragraph 4. For the “Ultimate outcomes”; “NPEP treatment practices and follow up testing” section: the mention of women for period 1 without mention of what happened to women in later periods was a little confusing and perhaps distracting. The article suggests that the program focused on gay men, but it sounds like women were receiving nPEP inappropriately at a high rate, and it would be helpful to know if this changed over time. Or perhaps could delete any mention of the women if it seems like a distracting element given the main thrust of the study involves gay men.

Discussion:

1. Paragraph 2. When discussion the 2010 PGCPS survey and postulating that younger participants could account for the decline in nPEP awareness, it would be helpful to cite data that younger gay men reported lower awareness on that survey (or on a similar one if available), as it’s not obvious that younger men would be less aware than older men.

2. Paragraph 6. “The majority of sexuality sensitive doctors surveyed in this evaluation were aware about the availability of nPEP, but this was limited by the low survey response rate.” Would suggest expanding a little to qualify any conclusions about the impact of the intervention on provider behaviors given these limitations, as the data are too unstable to make any firm conclusions at all.

Conclusions:
Might the authors suggest how they would recommend that other replicate their program in light of their findings? I think it would be more helpful in the conclusion to hear how this model could impact programs elsewhere than to focus on details about how to modify the local questionnaire. Would also make sure that the conclusion focuses on the program itself (or at least mentions the program) given it is the focus of the study.

- Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)


2. Figure 2: Would label the vertical axis on the Figure (eg, % aware of nPEP)

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I have conducted research focusing on the use of antiretrovirals for HIV prevention with project support from Gilead Sciences and Bristol-Myers-Squibb.