Author’s response to reviews

Title: Evaluating the impact of a quality management intervention on post-abortion contraceptive uptake in private sector clinics in Western Kenya: a pre- and post-intervention study

Authors:

Susy Wendot (Susy.Wendot@mariestopes.or.ke)
Rachel Scott (rachelvs@gmail.co.uk)
Inviolata Nafula (ivynafula@gmail.com)
Isaac Theuri (Isaac.theuri@mariestopes.or.ke)
Edward Ikiugu (Edward.ikiugu@mariestopes.or.ke)
Katy Footman (Katy.Footman@mariestopes.org)

Version: 1 Date: 18 Oct 2017

Author’s response to reviews:

We thank the reviewers for their constructive comments, which have helped us to improve the manuscript.

A full point by point response is below.

****************

Reviewer reports:

Reviewer #1: An interesting study on an important topic, however I have some concerns about the methodology for the statistical analysis. Please find my comments by section below.

Background:

Last sentence of paragraph 1 requires a reference.

We have added the omitted reference.

Methods - Quantitative data analysis:

There is clustering in the data, i.e. clients are clustered within clinics. There are a number of clinic-level factors that are likely to influence client-level responses and outcomes. The
Hierarchical nature of the data should be taken into account in the logistic regression analysis to produce valid estimates of standard error and confidence intervals.

We thank the reviewers for raising this important point and have rerun the analyses taking into account the clustering within clinics. We have added a note on this in the methods section [lines 173-174].

Results:

Please provide the total number of clients who completed the interview pre-intervention and post-intervention. Similarly, the total n pre- and post-intervention who completed the follow-up telephone interview would also be useful. Either in text or table 2.

We have added these figures to the text [lines 198-199].

What % of clients had a medical, < 12 weeks surgical, > 12 week surgical abortions? Would this effect the uptake/provision of PAFP from a client or practitioner perspective? For example, if a follow up appointment is required after medical CAC, does this provide an extra opportunity to counsel on PAFP?

We do not have data to differentiate between <12 and >12 week surgical abortions. However, more (68% vs. 58%) clients had surgical than medical abortions at endline compared to baseline. We agree that whether the client had a medical or surgical abortion may affect uptake of PAFP. In these revised analyses we have adjusted for type of abortion in the analyses of the association between the intervention and family planning outcomes.

"Uptake of PAFP" section - results at lines 201-204 (second and third sentences) do not match up with results provided in tables 3 and 4

We have amended these figures [line 248-249].

Table 3 - 3rd column labelled "aOR and 95% CI" should be labelled cOR for crude results.

We have amended this.

Reviewer #2: Background

lines 75-77 - please provide a reference for the statement In the background "quality management" has not been defined, nor is there any discussion of the literature on the use of this approach in the post-abortion care setting to provide the rationale for this study. This should be discussed briefly.

The term "end-line" is potentially confusing. Consider changing to "post-intervention" or "after the intervention" throughout the paper.
We have added more information on quality management relative to abortion care, and have also clarified the rationale for the study [lines 92-97].

We have changed end-line to post-intervention throughout the paper.

Methods & analysis

Please include references to back up the figures (e.g. baseline) used in the sample size calculation.

The baseline figure used here is based on MSI’s routinely collected data on clinic level PAFP uptake. We have added this to the methods section [line 153-155].

Why were condoms excluded from the outcome? Are they a popular form of contraception in this setting?

Condoms were excluded from the outcome because this intervention aimed to increase uptake of highly effective methods of contraception, that is to say hormonal user dependent methods, long acting reversible methods, and permanent methods. In addition to their lower effectiveness, condoms alone were not considered PAFP in this intervention as providers may try to improve their PAFP provision by simply distributing condoms to post-abortion clients, rather than providing quality counselling on family planning. We have clarified this in the methods [lines 122-129].

How were the nine providers recruited for the interview? What are their characteristics?

We asked them whether they were willing to take part in an in-depth interview when we took their initial informed consent to take part in the study. Then we re-visited each clinic at the time we conducted interviews and asked whether they were still willing to take part. All nine providers agreed to take part. We have added this information, and their characteristics, to the manuscript [lines 181-184, and lines 114-116].

The data should be re-analysed to account for potential clustering within health services.

We have re-run the analyses, taking into account that individuals are clustered within clinics, and noted this in the methods [lines 173-174].

What confounding factors were considered?

The analyses were adjusted for age group, education, occupation, marital status, number of children, fertility intentions, use of family planning prior to the abortion, clinic, and type of abortion (medical or surgical). These are listed below the tables and we have added them to the methods [lines 174-176].

Were data for the three services that dropped out completely removed from the paper?
Yes. This has been clarified in the methods [lines 176-177].

There is no information presented about the characteristics of clinics or their clients? Were they similar across the nine sites?

We have some data on the characteristics of the clinics, which we have added to the methods section [lines 114-116]. Client characteristics also varied across clinics and we have summarised this variation in the results [lines 214-215].

Discussion

Please comment on the finding that women were less likely to obtain a method within 14 days of the abortion after the intervention - why might this be so?

There was no difference before and after the intervention in the odds of women obtaining a method within 14 days of the abortion. This was unclear in the discussion and we have rectified this. We have also added a line into the table showing the odds of obtaining a method within 14 days of the abortion, as well as same day and 2-14 days post abortion.

The results show that women were more likely to obtain same day PAFP after the intervention, and there was some evidence that women were less likely to obtain a method 2-14 days after the abortion after the intervention, although this was not significant in multivariate analyses. Together, these findings suggest that the intervention may not have increased uptake of PAFP overall, but that it resulted in women who did obtain PAFP obtaining it sooner after the abortion (i.e. those women who would have returned were provided with it on the day [lines 314-316]).

The discussion is fairly superficial. There is no discussion of the recommendations for practice and for research arising from this study. There is also limited discussion of how this study relates to other quality management interventions in sexual health. Perhaps the intervention strategies were not comprehensive enough?

We have added a discussion of the recommendations for practice and research [lines 368-383].

We agree that the manuscript would be improved by more discussion of how the study related to other quality management interventions, and have added this into the text [lines 358-366].

The biggest limitation is the study design - namely the lack of randomisation of clinics to the intervention. Please discuss this including the implications of this in terms of bias and confounding. The big loss to follow up at the 2 week interview is also a major concern - this should be discussed further, including what steps were taken to try and improve rates of follow up.

We agree that the lack of randomisation poses limitations to the study design and have developed this section in the discussion [lines 391-397].
We have expanded our discussion of the potential impact of loss to follow up on our results, and added information about the steps taken to try to improve follow up [lines 409-414 and lines 164-168].

Tables

Table 1 - while reporting on differences in those lost to follow up, Table 1 should describe the characteristics of two comparison groups, namely, those in the baseline and end line groups, to provide the reader with data on how similar these groups were.

We agree that a table describing the characteristics of the two comparison groups is more useful to the reader than the table we presented describing the characteristics of those lost to follow up vs. followed up. We have replaced the latter with the former.

I couldn't see how Table 4 is relevant as it seems to combine the baseline and endline groups and simply make comparisons between the different strata within each characteristic.

We agree that this table adds little to the overall message of the paper, and have removed it.