Reviewer's report

Title: Retaining young people in a longitudinal sexual health survey: a randomised controlled trial of strategies to maintain participation

Version: 1 Date: 5 January 2009

Reviewer: Robert Rhyne

Reviewer's report:

1. Question well defined? (Discretionary revisions)

Yes the question is interesting, relevant and well defined. The background section reviews the literature but no quantitative response rates are given for the relevant papers reviewed. It would help to have those data in order to compare the present findings to previous response rates.

2. Methods appropriately and well described?

The methods are confusing and could be described better. This subtrial is not a clean RCT of different incentive strategies. The interventions differ by cohort and wave (age) of the study participants. Only one cohort, at one point in time was randomly allocated to 3 different financial incentive groups. One cohort was offered a definite incentive at one age period and no other choices were offered to this group at that time. And the definite incentive was offered to both cohorts at the last wave and no other choices were available at this time period.

This seems to this reviewer to be more of an observational study than a RCT. Because the methods are so variable and inconsistent, this is an hypothesis generating study rather than a definitive trial. It would help the reader to have a figure of the study flow. (Minor essential revisions)

On page 6 it states that a 15 pound Kingfisher voucher was offered to Cohort 1 at age 20, but this amount does not appear in the rest of the manuscript. Is this a typo? If not, it needs to be included in the rest of the manuscript, ie the results descriptions and tables. If there are two different amounts of the definite incentives, they need to be analyzed separately. (Major Compulsory Revisions)

Only Cohort 1, wave 3 was randomly allocated to different financial incentives, which did not include a definite incentive strategy. In the final waves of the study, apparently all participants were given definite incentives of either 10 or 15 pound Kingfisher vouchers, which was not a RCT design. The authors should change the title of their article, it was not a pure RCT. It was a trial, but not fully randomized. (Major compulsory revisions)

3. Data sound?

This reviewer is not a statistician, but there are significant questions about how the data are handled.
Results:

In table 1, Wave 2 combined results of 27% who had left school. Text states the combined results of 81% vs 39%. I assume these are for both cohorts combined. It would be helpful to see response rates of the respondents still in school and those who had left, by cohort, in Table. (Minor essential revisions)

Table 2 is very confusing to this reviewer: (major compulsory revisions)

1. It introduces the term “wave 0” which has not been used previously in the manuscript. Presumably this is wave 1, the baseline wave of 13/14 year olds, described in the methods section. This could be very confusing to readers and is inconsistent.

2. Isn’t this the number (%) of NON responders by wave? It is not the numbers of participants as indicated in table 1.

3. The total numbers do not correspond to Table 1.

Table 3 is interesting, but I would like to know the response rates and numbers of respondents for each category, as well as the odds ratios and CIs, especially since some of the categories for responders are above 1 and some are below. (Discretionary revisions)

The reason for the N/A categories is not clear. Since other variables in the table include missing data, can the reader assume that none of the respondents answered these questions? Please explain more fully. (Major compulsory revision)

Table 4: Since not all variables have a consistent total number, it would be better to put the column totals in the first row with the overall definition of the columns. This type of table usually comes before any analysis tables. (Minor essential revisions)

Table 5: Was there any interaction between the control variables in your model and the outcome of participation? (Discretionary revisions)

Models presented in Table 5 are confusing to this reviewer. Under the variable for “Type of rewards…” there are 4 options listed but my understanding of the methods was that: a) only cohort 2 of 18 year olds were offered the 10 pound incentive, and the other incentives did not apply to them, and b) none of the 20 year olds were offered the non-definite incentives. Is it proper to analyze these together in one variable, because they were not directly compared using the stated RCT methods? This needs to be addressed in the text. (Major compulsory revisions)

4. Adhere to relevant standards of reporting…?

One of the basic standards is whether of not someone not involved in the study could recreate the study from the description of the authors. It would not be
possible in this study, because the descriptions are difficult to follow and are
confusing. The methods section could be improved considerably. It is not known,
for example, how the respondents were distributed with respect to the original
intervention of teacher education in the SHARE trial. (Minor essential revisions)

5. Discussion well balanced and supported by the data?

6. Limitations?

The discussion could be much more informative. There was no discussion of the
limitations of the study design or what the next step of research in this area
would be. (Major compulsory revisions)

The authors state that having the choice of a chance at a 500 pound voucher at
age 18 effects the response rate at age 20 despite the fact that this option was
not offered to the 20 year olds. Could this be a type 1 statistical error? The
results need more discussion and interpretation in the discussion section. (Major
compulsory revisions)

7. Acknowledge other work?

The discussion would be a good place to compare their results with the published
response rates. No mention is made of the results of the SHARE trial. Are they
relevant here? (Minor essential revisions)

8. Title and abstract convey findings?

I would recommend a change in the title from a RCT to the more appropriate
Longitudinal or observational study design. Only a small portion of the study was
a RCT. (Major compulsory revisions)

9. Writing acceptable? Yes with comments above considered.

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

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