Reviewer's report

Title: Chinese women's knowledge and future preference after undergoing non-invasive prenatal testing for positive aneuploidy screening: a questionnaire survey

Version: 2

Date: 1 April 2015

Reviewer: Annette Bernloehr

Reviewer's report:

1. Is the question posed by the authors well defined?

The questions are well defined and explicitly mentioned at the end of the background chapter. However, the sole definition of the population as ‘Chinese women who underwent NIPT’ runs too short. Obviously, the population is Chinese women in a large public hospital in Hong Kong who underwent NIPT.

2. Are the methods appropriate and well described?

The methods are described to enable understanding of what has been done. They are appropriate to answer the research questions. However, usually the setting is described first in the methods chapter. Some more details might help the reader, e.g. to explain what ‘first trimester combined’ means (line 90 of the manuscript). Also the term ‘booking gestation’ (line 91) needs revision. Is the week of gestation at the time of booking meant?

Moreover, from my point of view it would be advisable to refer in the methods chapter to Table 1 in order to direct the reader to the ‘… ten knowledge questions’, which were developed on the basis of the rapid response statement of the Board of the International Society for Prenatal Diagnosis.

One major question with regard to the appropriateness of the research design is that the women filled in the questionnaire ‘with the assistance by an experienced midwife’ (line 108). This seems to be questionable, as it might have introduced significant bias. It is not clear to me why Chinese women needed help with filling in Chinese (?) questionnaires. Such assistance would have made sense to me if the study included women living in Hong Kong, irrespective of their mother tongue. This part of the research design requires explanation and justification, and needs to be addressed as a potential limitation of the study.

3. Are the data sound?

Overall, the data and the applied statistical methods are sound.

4. Do the figures appear to be genuine, i.e. without evidence of manipulation?

No figures included.

5. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Yes. It is advisable to write ‘T21’ and ‘T18’ in full, before using the abbreviations. In line 124, reference is made to ‘all babies’. Here, it is not clear to which ‘all’ this refers. All those screened to be low risk, all screened, etc.?

It is interesting that the marital status / cohabitation has obviously not been asked for.

In the results chapter (line 139ff) the reader finds that ‘... less than 10% answered correctly.’ Please note that not all your readers are experts for NIPT. It would be grossly helpful if you marked the correct answers e.g. in the table, to inform them about which answer would have been correct.

6. Are the discussion and conclusions well balanced and adequately supported by the data?

The discussion is well balanced and adequately supported by the data. However, there is a statement that it is a major strength of the study that the ten knowledge questions in the questionnaire were designed according to the ISPD rapid response statement. If this is a major strength of the study, the reader needs to see the full questionnaire and the questions somewhere. To this, no explicit reference is made in the text.

7. Are limitations of the work clearly stated?

Limitations are addressed, but need to discuss the influence of experienced midwives to help with filling in the questionnaire.

8. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Yes, reference to the work of others is made and used to put own findings into the context of previous knowledge.

9. Do the title and abstract accurately convey what has been found?

OK.

10. Is the writing acceptable?

Yes, although some minor revisions are required.

Minor Essential Revisions

Abstract:

Please define the study population more precisely: Chinese women in a major public hospital in Hong Kong who underwent NIPT.

The setting is missing.

Make sure that you introduce all abbreviations in full before using them (e.g. ‘ISPD’ in line 30ff and line 48).

Background:
Please mention in the research questions that your sample population was Chinese women in a major public hospital in Hong Kong who underwent NIPT.

Methods:

Please mention the setting first.

Please explain what ‘first trimester combined’ means (line 90 of the manuscript). Also the term ‘booking gestation’ (line 91) needs revision. Is the week of gestation at the time of booking meant?

It would be advisable to refer in the methods chapter to Table 1 in order to direct the reader to the ‘… ten knowledge questions’, which were developed on the basis of the rapid response statement of the Board of the International Society for Prenatal Diagnosis. This is of special importance as the use of this questionnaire is later described as a major strength of the study (line 236ff). If this is a major strength of the study, the reader needs to see the full questionnaire and the questions somewhere.

Results:

It is advisable to write ‘T21’ and ‘T18’ in full, before using the abbreviations. In line 124, reference is made to ‘all babies’. Here, it is not clear to which ‘all’ this refers. All those screened to be low risk, all screened, etc.?

In the results chapter (line 139ff) the reader finds that ‘… less than 10% answered correctly.’ Please note that not all your readers are experts for NIPT. It would be grossly helpful if you marked the correct answers e.g. in the table, to inform them about which answer would have been correct.

Discussion:

Please correct the header in ‘Discussion’.

Line 229 change ‘did’ to ‘were’.

Line 241 ‘Knowledge’ with a lower case ‘k’ here.

Table 1:

Please show a concrete number for ‘Advanced maternal age’. What is the threshold for ‘advanced’ you used?

Table 2:

In question 1 there is the abbreviation ‘CVS’. In question 3 the reader finds ‘chorionic villus sampling’. It would be preferable to have the same in both questions. If CVS is not explained before, the full statement is superior to ‘CVS’.

Formatting of this table can be optimised by placing the percentages consistently underneath the n.
Major Compulsory Revisions

One major question with regard to the appropriateness of the research design is that the women filled in the questionnaire ‘with the assistance by an experienced midwife’ (line 108). This seems to be questionable, as it might have introduced significant bias. It is not clear to me why Chinese women needed help with filling in Chinese (?) questionnaires. Such assistance would have made sense to me if the study included women living in Hong Kong, irrespective of their mother tongue. This part of the research design requires explanation and justification, and needs to be addressed as a potential limitation of the study.

In Table 2, question 4, the reader finds actually two questions in one. This is against the classical construction of questionnaires, and not very helpful. It raises questions with regard to questionnaire development, checking by experts for face validity, and piloting it. Such a mistake is acceptable as you call your work a ‘preliminary study’ (line 242). However, in case of a preliminary study, such problems need to be addressed. Moreover, the study needs to be labelled as a preliminary study e.g. in the abstract and the methods. Limitations need to be discussed with regard to the developed questionnaire as well.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests