Reviewer's report

Title: Determinants of cancer screening awareness and participation among Indonesian women

Version: 1 Date: 03 Oct 2017

Reviewer: Judith Offman

Reviewer's report:

This manuscript describes an extensive study of determinants of cancer screening awareness and participation among Indonesian women with questionnaire data on 5,397 women. The authors identified a number of factors associated with cervical and breast cancer screening awareness and participation. As this study was part of the Indonesian Life Survey a large amount of data was collected in addition to the cancer screening specific questionnaires, and a large number of women could be sampled. This allowed for an extensive analysis of factors influencing screening knowledge and behaviour, and resulted in highly statistically significant findings.

The main issue with this study is that, in some sections, important information is missing, or findings were not presented very clearly. Please find my comments below to address these issues.

Major comments:

Materials and methods:

1) Could the authors please provide more information on the cancer screening questionnaire that was used. Has this questionnaire been previously validated, or been validated as part of this study?

2) Furthermore, it is not clear why participants were asked whether they ever had any Pap smear in their life, but mammography only in the past year. Does this relate to the current guidelines for mammography in Indonesia? Would women between 40 and 50 be recommended to have mammography? It would be helpful if the authors could provide more information on the current guidelines, and why the mammography question only referred to the previous year. If mammography is only recommended for an older age group could you please provide the proportion of women eligible / recommended to have the test who attended mammography?
3) It is not clear how clustering was taken into account in the multivariate analysis. Please provide more information.

4) It is not clear which variables were included in your multivariable analysis, and why these factors were included. Could you please specify.

Discussion:

1) The way participants of the IFLS were originally sampled, and changes that might have occurred between the first survey and the most recent one could have resulted in selection bias. Could you please briefly discuss what was done to reduce the potential for bias in the original study, so that it becomes clearer how representative this study population is of the entire population. Furthermore, how could the time between the selection of the study sample in the 1990s and the most recent survey have resulted in any bias?

2) The demographic characteristics of the women who responded to the questionnaires on screening was different compared to all women above 40 with regards to a number of the variables. Could you please briefly discuss this in the study limitations section.

Minor comments:

Tables:

The tables would be easier to understand if more information was provided.

1) Table 1: Please provide more information in the table legend, eg. Size of the study cohort. Furthermore, the mean for household expenditure, BMI and some of the other variables is not as informative as N (%) per subgroup would be. It would be helpful if similar subgroups as in table 2 and 3 could be used.

2) Tables 2 and 3: The tables would be easier to follow if you could provide total numbers for each category, e.g. aware of Pap smear (N= ).

3) Figure 2 and Table S2: Could you please include the variables included in the multivariate analysis in a footnote, or specify the variables included in the table legend. For Table S2 please specify reasons for using bold print.
Results:

1) Could you please include number of women in addition to percentages for the main outcomes (awareness of and participation in the different screening methods).

2) It would be helpful to include odds ratios for the associations in the text.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable
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