Author’s response to reviews

Title: Exploring the characteristics of newly defined at-risk drinkers following the change to the UK Low Risk Drinking Guidelines: A retrospective analysis using Health Survey for England data

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Author’s response to reviews:

Dear reviewers and editors,

Many thanks for taking the time to read our manuscript and for the extremely helpful comments. In light of your comments, we have made significant changes to the manuscript, including a re-analysis of the data in line with reviewer 2’s suggestions, which we believe has much improved the analysis and inferences that can be made from the results.

Please find a revised manuscript attached and a description of the changes made below:

Reviewer 1:

Title:

Many thanks for your comments. We have removed ‘Newly at risk?’ and reworded the title for clarification.

Abstract:

- Line 6: ‘was reduced from 21 to 14 units per week’ added.
- Line 9: ‘demographic’ added to characteristics. Due to word limit within the abstract, a full list of variables has not been included here, but we hope that demographic characteristics adds some clarity.


- Conclusion section revised in line with study conclusions.

Background:
- Page 3 / line 5: we have briefly mentioned the reasons for the change to guidelines here, and the reasons for the change are expanded upon later in the paper as per the point below:
- Page 3 / line 50: further information on the links between alcohol and cancer a have been added.
- Page 4 / line 7: further information on education and information interventions has been added here.
- Page 4 / line 24: changed to less emotive language.
- Page 4, line 24 – 5 years (from 2011-2015) was the timeframe because 2011 was the first year that the quantity –frequency measure of alcohol consumption was reinstated in the Health Survey for England and 2015 was the most recent dataset available at the time of analysing the data. We have added some further detail to the section ‘Methods: Sample’ (page 5).

Measures:
- Page 5, line 5: we have added further information about how the alcohol information is collected.

Results:
- Page 7 line 19 – Year of data used has been added both to the results section and the tables.

Discussion:

The discussion section has been broadly re-written in line with the new analysis and in light of your comments, we have taken care to include more information on potential implications regarding educational campaigns.
Reviewer 2:

Abstract:
Thank you for your comments on terminology. We have changed the terminology to simply ‘at-risk’ for men drinking above the low risk drinking guidelines and used at-risk under the previous guidelines versus at-risk under the new guidelines to differentiate. We have also described what this means in terms on units throughout the paper. We hope that this makes the terminology and the paper clearer.

Background:
We have added some detail to the background section in order to clarify and justify our objectives. The reasons for this paper are:

1) We now know that men’s health is at-risk from fewer units of alcohol per week than previous thought and therefore establishing how many additional men are at-risk and identifying ways of targeting these men either through education or screening would be beneficial in enabling them to reduce consumption down to low risk levels.

2) Clinical services are tasked with screening for at-risk drinkers and offering brief interventions and if the number of at-risk drinkers significantly increases, this will have cost and feasibility implications for these services. Therefore establishing the number of additional at-risk drinkers may help with decisions regarding commissioning for screening and brief intervention. Furthermore, policy within England favours targeted screening and therefore identifying specific groups of men who may benefit may assist with identifying criteria with which to target screening.

Table 2 has been relabelled so that tables follow the order of the paper. With regard to your query: Yes, women are included in the calculation. The population prevalence estimate is calculated using the ONS population estimate (men and women) aged 16+ living in private households, which is multiplied by the proportion of respondents with a valid alcohol measure in the relevant age-sex group (e.g. men aged 16-24), multiplied by the estimated prevalence (in this of drinking 14-21 units/wk) in the relevant age-sex group (e.g. men aged 16-24). More details can be found here: https://files.digital.nhs.uk/publicationimport/pub22xxx/pub22616/hse2015-pop-no-est-user-guide.pdf

Methods:
We have regrouped the age groups into 20 year age bands and regrouped marital status into married/cohabiting vs single vs separated/divorced/widowed in order to address some of the sample size issues.

Analysis:

Many thanks for your helpful suggestions and comments. In light of your comments regarding power, we have re-run the analysis as per your suggestion to compare the characteristics associated with being at-risk (>21 units/week) vs low risk (≤21 units/week) drinkers according to the previous guidelines; and the characteristics associated with being at-risk (>14 units/week) vs low risk (≤14 units/week) drinkers according to the new (2016) guidelines, which we believe has solved the issue with the small sample size of men drinking 14-21 units per week. We have included descriptive statistics relating to which groups had the largest increases in percentage of at-risk drinkers to help explain the results and we conducted two logistic regression models, the outputs of which are described as odds ratios.

With regard to the issue of where newly defined at-risk drinkers are situated, we believe that the removal of ‘higher risk’ groups in order to compare binary outcomes of low risk vs at-risk diminishes the importance of whether newly defined at-risk drinkers are situated between low and high risk as this is no longer the research objective we are exploring.

Discussion:

The discussion has been rewritten in line with the findings of the new analysis and with a focus on educational interventions in addition to screening and brief interventions.

We have added a section on strengths, limitations and future directions in line with standard discussion sections.

We would like to thank both the reviewers and the editors for taking the time to review our manuscript and make comments, and we hope that you will agree that the manuscript is now much improved.

We look forward to receiving your response relating to the changes we have made.
Yours sincerely,

Philippa Case, Nicola Shelton and Linda Ng Fat