Author’s response to reviews

Title: A comparison of gender-linked population cancer risks between alcohol and tobacco: how many cigarettes are there in a bottle of wine?

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REVIEWER 1

Freddy Sitas, D. Phil (Reviewer 1): I'd like to thank the authors for attending to the referees comments. The point is now made, about alcohol being a common exposure and smoking being rarer, but because of the respectively low and high relative risks, the numbers of cancer cases affected in the population turn out to be about the same. Which is an important public health message that needs to be communicated.

There is therefore one outstanding comment that requires careful thinking and rewording.

The point of the paper is that the number of cancers (not all deaths) caused in the population by a bottle of alcohol per week is about the same as smoking 5-10 cigarettes per week. This is not the same as saying a bottle of wine a week is as dangerous to an individual as smoking. So the statement / paragraph below (P16 Line 7) is misleading.

"The benefits of increasing public awareness of the risks of moderate drinking could therefore be immense. The majority of these women are currently unaware of the cancer risk, and we suspect
may be surprised and perhaps horrified to learn that a drinking a bottle of Prosecco has the same risk as smoking ten cigarettes per week."

This is much more clearly articulated in the rest of the paper eg. : "Drinking one bottle of wine per week results in an increase in absolute lifetime risk of cancer equivalent to smoking ten cigarettes a week for women, and five for men."

The message ought to be better pointed to a Chief Health Officer about the opportunities for prevention at the population level rather than trying to describe risks at an individual level.

We thank the reviewer for this comment and have re-worded the sentence “The majority of these women are currently unaware of the cancer risk, and we suspect may be surprised and perhaps horrified to learn that a drinking a bottle of Prosecco has the same risk as smoking ten cigarettes per week” to “The majority of these women are currently unaware of the cancer risk, and we suspect may be surprised and perhaps horrified to learn that a drinking a bottle of wine per week carries the same cancer risk as smoking ten cigarettes per week.” Page 15, Line 15-18.

We have also added in the sentence “Furthermore we hope this data will inform Chief Medical Officers of further opportunities for prevention of cancer at a population level.” Page 15, Line 20-22.

I suggest the title is changed to ‘population cancer risk’ rather than cancer risk, to avoid any misunderstandings by other readers and especially the media.

We have changed the title from ‘A comparison of gender-linked cancer risks between alcohol and tobacco: how many cigarettes are there in a bottle of wine?’ to ‘A comparison of gender-linked population cancer risks between alcohol and tobacco: how many cigarettes are there in a bottle of wine?’
Sakari Bertel Alfred Suominen (Reviewer 2): Reviewer number 1 raised a very good point on the necessity to discuss that the paper deals with absolute and not relative risk of cancer only. I have nothing to add at this point and I recommend publication.