Author's response to reviews

Title: Trends in all cause and liver-related hospitalizations in people with hepatitis B or C: a population-based linkage study

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Author's response to reviews: see over
22 November 2010

To: Professor M Norton  
Editor-in-Chief, BMC Public Health

Re: Second resubmission of manuscript 1949218944211241

Dear Professor Norton,

We have considered the reviewers’ comments and made some amendments to our manuscript entitled:

“Trends in all cause and viral liver-related hospitalizations in people with hepatitis B or C: a population-based linkage study”

written by HF Gidding, GJ Dore, J Amin and MG Law.

Enclosed is our revised version with changes highlighted in yellow. We have added the fact that the data used in our study are confidential and use was approved by University of NSW and the NSW Population and Health Services Research Ethics Committees. Our responses to the reviewers’ comments are included on the following pages:

Yours sincerely

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I have a few comments or "Discretionary revisions" related to your answers on the following:

Q8: It's not necessary to add the new sentence with information on the diagnostic criterias. I think it would be enough to change the first sentence ..."notified with acute or chronic HCV or HBV infection"... Together with the change in the discussion this is now clarified. However - resolved infections included in the cohorts could not only underestimate the related liver morbidity, but also, if there was a difference in percentage of resolved infections in the cohorts, for example if there was a high percentage of acute heptatis B in the HBV cohort this could contribute to the difference with a false too low risk in the HBV cohort. Do you have any idea of the percentage of acute infections in the HBV-cohort?

Authors’ response: The authors have changed the section on data sources in the methods section as suggested.

Regarding the percentage of notified cases with acute infection, this is likely to be low for both HBV and HCV (although the exact proportion is unknown) so a differential bias is unlikely. It is estimated that 75% of HCV infections are chronic (Micallef et al, 2006) and most notified cases of HBV are also likely to be chronic given that a high proportion are thought to have acquired their infection in endemic countries during childhood (as described in the second paragraph of the discussion). This has been added to the limitations section of the discussion section.

Q10: OK, then you can justify your choice, maybe a comment on that? (Our experience is that much more than 14 days from HBV/HCV diagnosis are needed to get a fairly unbiased risk for hospitalization...)

The authors have reworded the section on exclusions to show why we chose 14 days as follows:

‘For the study cohorts, we examined the distribution of hospitalizations around the time of diagnosis and determined that excluding admissions before or beginning within 14 days of the HCV or HBV diagnosis (or earliest of the two diagnosis dates if co-infected) was sufficient to reduce the bias towards higher rates of admission around the time of diagnosis, as previously noted [5] (n= 38 922, 15.3%).’
About the references: You have plenty of references, do they all contribute? Reference 48 "submitted" - is it accepted to use a reference that is not yet published?

The authors have changed the reference to an earlier linkage paper (Amin et al) about trends in liver cancer that is published.

We added in a considerable number of references at the request of reviewers, but if the editors feel the list of references is now too long, we would be happy to look at reducing the number.

Reviewer 2: Scott McDonald (1290898821478230)
The authors have more than adequately addressed my previous set of comments and suggestions. I would additionally suggest that the plots of rates should show 95% confidence intervals around the point estimates.

The authors have prepared three new graphs with confidence intervals shown for the rates. However, figure 1 becomes quite busy so we leave it to the editors to decide whether to include the updated version or not.