Author's response to reviews

Title: Behavioral and clinical correlates of serum bilirubin concentrations in Japanese men and women.

Authors:

Maya Tanaka (mayatnkmayatnk@gmail.com)
Sanjeev Budhathoki (sanjeev@phealth.med.kyushu-u.ac.jp)
Akie Hirata (hirata-a@phealth.med.kyushu-u.ac.jp)
Makiko Morita (mmorita@med.kyushu-u.ac.jp)
Suminori Kono (skono@phealth.med.kyushu-u.ac.jp)
Masahiro Adachi (adachi@intmed3.med.kyushu-u.ac.jp)
Hisaya Kawate (kawate@intmed3.med.kyushu-u.ac.jp)
Keizo Ohnaka (oonaka@geriat.med.kyushu-u.ac.jp)
Ryoichi Takayanagi (takayana@intmed3.med.kyushu-u.ac.jp)

Version: 2 Date: 29 June 2013

Author's response to reviews: see over
29 June 2013

Dr Chaoyang Li
Editor
The BioMed Central Editorial Team


Dear Dr Chaoyang Li,

Thank you very much for your consideration to the above-referenced manuscript. We revised the manuscript in response to the reviewers’ comments and would like to submit the revised version for publication in BMC Endocrine Disorders. Changes made in the revision are described below and shown in red. The comments were numbered by class of comments for each reviewer, if not numbered.

-----------------------------------
Reviewer 1: Zheng Chen
-----------------------------------

Comment
These findings demonstrate that smoking, coffee consumption, and HbA1c were negatively associated with serum bilirubin concentration, and HDL cholesterol was positively associated with serum bilirubin concentration. The results indicated that lifestyles significantly affect serum bilirubin concentration. This study is important, with results valuable data. This paper is adequate in the quality of tables and figures, and easily understood.

[Response] We appreciate the supportive comment. No change was required.

-----------------------------------
Reviewer 2: Libor Vitek
-----------------------------------

Major Essential Revisions

1) The term ‘inverse’ relationship (y = b/x), commonly used within manuscript, is, in fact, a ‘negative’ relationship (y = a – bx). This should be corrected within the whole text.

[Response] We changed the term “inverse” to “negative” throughout the text.

2) Alcohol consumption and bilirubin. This association is more likely to be due to underlying liver function deterioration mediated by ethanol. The authors should report a) AST/ALT activities within the whole cohort, b) relationship between alcohol consumption and AST/ALT activities, and c) most importantly, relationship between AST/ALT activities and bilirubin levels.

[Response] Yes, this is an important question. We evaluated this possibility and found that the alcohol-bilirubin association was not attributable to liver function deterioration. We discussed this matter, showing data relevant to each point (page 13).
3) When referring the lipid vs. bilirubin association, the authors should cite also the most recent paper by Wallner et al published in Clin Sci just recently.

[Response] We included this paper (reference 17).

4) Tables 1-2. Alcohol consumption should be stated not as mL/d, but as g/day.

[Response] We used a unit of g/day, and classified current alcohol consumption into <25, 25-49 and >=50 g/day. In the process of recalculation, we found that one man with a missing covariate had been erroneously included in the previous analysis. Men numbered 4802 correctly. Consequently, the numerical values in the Tables (mostly the last digits) were slightly changed.

5) Table 4. It is not clear, how season affected bilirubin levels. Lower or higher during winter?

[Response] We did not show regression coefficients in Table 4 for brevity, and the direction of the association is not clear from the table alone. We had mentioned bilirubin levels according to the seasons (the first paragraph on page 8). An explanatory sentence on season was added, however (lines 9-10 on page 11).

Minor Essential Revisions

1) page 11, last para: “alcohol consumption as well as smoking was an independent correlates...” should read: “alcohol consumption as well as smoking were independent correlates...”

[Response] Our grammar was correct. The verb for "A as well as B" depends on A. Yet, for smooth reading, we changed it to " smoking and alcohol consumption were independent correlates..."

2) page 13. "UGT1 A1" should appear as "UGT1A1".

[Response] Corrected as such.

In the above-described changes, we added the unit (mg/dL) and changed "95% CI" to "CI" in the titles of Tables 1 and 2.

We hope that the revision is satisfactory and would like to appreciate your support once again.

Best regards,

Maya Tanaka, MD
Corresponding Author