Reviewer's report

Title: Prevalence and determinants of diabetes mellitus among Iranian patients with chronic liver disease

Version: 2 Date: 27 September 2004

Reviewer: Gregory Kirk

Reviewer's report:

Alavian and colleagues have clearly made genuine attempts to address the review comments and suggestions. I think they have largely made the appropriate changes, documented the changes adequately and indicated sufficient reasoning when changes were not possible. I have one remaining major comment regarding the interpretation / limitations of their analysis, which I think should be addressed.

There is very minimal discussion of the limitations of their data / analytical methods which may influence their conclusions. I highlight some of these below:

1) Age cutpoints -- In their analysis, they use age < or >= to 45 years as the age variable. In interpreting this data, they suggest that age is less of an important factor in the cirrhotics than among the chronic hepatitis patients. Again, they do not provide mean ages of the individual study groups but only an overall mean. As most cirrhotics may be over 45 yrs, the use of this age cutpoint may be inaccurate. This cutpoint does not provide very refined analysis, which more broader categories or continuous age variables may allow.

2) No discussion of the possible reporting bias of family history of diabetes is mentioned or discussed. It is not unreasonable to think that pts with known diabetes may be more likely to have identified, know of, or think that they also have affected family members.

3) The authors should recognize that many of the variables are correlated and may represent a metabolic syndrome (DM, HTN, BMI, chol). For example, in their discussion of the role of hypertension, they state that it was not associated with DM. They should be clear that while DM is associated with HTN (see Tab1) in multivariate analysis is was not a predictor of DM (likely both are related to the metabolic syndrome and adjustment for other related variables removes this association).

I think discussion of these points would establish a stronger more coherent presentation of the data and indicate a firmer grasp of the analysis.

Minor comments dealing with style and presentation include the use of confidence intervals with the OR's rather than their use of P values. Isolated OR's are not easily interpreted without the CI's. Also, the legend of the multivariate tables should be explicit in describing that the model involved adjustment for the other variables in the table. Finally, as indicated in the earlier review, thorough editorial review for grammar, punctuation and style would be appropriate prior to final publication.

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No
Declaration of competing interests:

None