Reviewer's report

Title: Prevalence and correlates of alcohol and other substance use disorders in young adulthood: A population-based study

Version: 2 Date: 20 September 2009

Reviewer: Elisabeth Wells

Reviewer's report:

Major Compulsory Revisions
I am satisfied that the authors have adequately made the major compulsory revisions from the initial reviews. I had recommended that Table 4 and relevant text be removed. The authors have softened their approach by relabelling 'risk factors' as 'correlates' and making the paper much more of an exploratory one. In the light of this change, their mention of possible mediation pathways, and their defence of what they have done with an apposite quote from Cohen, I am prepared to withdraw my previous recommendation and accept their revised Table 4 and revised text.

I remain still somewhat uncomfortable about the interpretation of the importance of correlates after putting in correlates which are quite highly correlated with each other, so that one would expect that from study to study one correlate might appear more important sometimes whereas the other appears more important in other studies. At least the authors have not used stepwise regression.

Minor Essential Revisions
In Table 2 abuse and dependence are clearly mutually exclusive, as defined in DSM-IV (som studies, such as the NCS-R report abuse, whether or not there is dependence, and dependence, so that abuse and dependence are not mutually exclusive in those reports). Given that abuse and dependence are clearly mutually exclusive, their prevalences should sum, within rounding, to provide the total prevalence of either. This holds throughout Table 2 except for males for Alcohol. The total is 19.8 with abuse at 11.9 and dependence at 8.2. Even if abuse was 11.85 and dependence 8.15 the total would be 20.0. I suspect a copying error in here.

Discretionary Revisions
When I read the paragraph at the bottom of p15 about comparing models I immediately thought, 'Of course the LL improved when they added in more variables'. Inspection of Table 4 shows that the appropriate test was carried out to compare models, with df for the comparison being the number of new variables. To prevent other readers thinking critical thoughts before inspecting the table I wondered if the authors might consider adding a sentence or phrase along the lines of, 'Note that these comparisons take account of the number of additional variables'.
Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests