Reviewer's report

Title: New estimates of the number of children living with substance misusing parents: results from UK national household surveys

Version: 1 Date: 28 April 2009

Reviewer: Petra Meier

Reviewer's report:

This is an important and well-written contribution, with a clear and well-defined question. I have however a number of comments on the paper, which I would encourage the authors to consider in the spirit of improving the manuscript.

Major compulsory revisions

1. The central argument by the authors is that current estimates need updating because treatment seekers may not be representative of all drinkers and drug users. Whilst the current estimates include an inflator for problematic users not in treatment, the authors argue that this is still an underestimate of the number of children affected by drinking and drug use. A counter-argument would be that treated drug and alcohol users may be representative of those who drink and use drugs to an extent that might be expected to interfere with childcare. For example, is it plausible that binge drinking as defined in GHS/HSE would be necessarily (or even likely) associated with problematic parenting? Particularly where parents are not sole caregivers, or where children are not very young? What evidence there is about levels of drinking and child outcome should be critically reviewed, and the authors might then propose credible mechanisms by which infrequent drug use, or binge drinking, could pose a risk to children.

There is quite a bit of acknowledgement of these issues in the discussion, but since the whole article rests on the assumption that what the authors provide is a better estimate than what we currently have, they might need to make a better case early on for why they think this is so.

2. Drinking definitions

a) This appears a somewhat uncritical adoption of government cut-offs. Why do these make sense in terms of parental responsibilities? What does existing evidence say about levels of drinking and drug use that are associated with “harm”? 

b) There is a slight mismatch with official cut-offs: government & the ONS survey analysts use 50+/35+, not 51+/36+ as in this paper. The authors could use the official cut-offs or remove the reference.

c) Binge drinking is defined by government as regularly exceeding the 6/8 limit, therefore the maximum unit variable is often combined with a frequency variable in the surveys, especially when referring to chronic rather than acute alcohol related harms. Arguably, problems arising from parental binging would arise from...
either a frequent display of the behavior or a substantial exceeding of these limits. How was this handled – was the “maximum daily” variable manipulated in any way?

3. “However, there are also implications from these findings for agencies that aim to encourage the uptake of substance use treatment and for universal educational initiatives aiming to raise awareness of the harms parental substance use can pose to their children.” The authors freely admit that we do not currently understand the association between irregular drug use and non-dependent drinking and harm. So to talk about new education initiatives to educate parents about harm appears pre-mature, and I would probably not go further than to urge that research is needed.

4. Clarify how the data sets are extrapolated to the UK population (use a weighting variable?). The authors should acknowledge problems with this approach, i.e. that understanding of sampling biases gets more important, as they are magnified through weighting. There is also evidence that under-reporting of substance use is not the same across different population groups in household surveys, and the authors need to consider implications.

5. “This is due to the fact that hazardous and dangerous drinking could only be calculated from weekly units consumed for a sub-sample (those reporting they drink the same amount every day) participating in the national surveys. Thus those exceeding the recommended weekly units by drinking different amounts on different days e.g. 1-2 units 3 days a week and 10 units each day at the weekend would have been excluded.” I am unsure how this works: Would this lead to under- or over-estimation and what about introduction of bias? The key here is for the reader to understand how the authors use this regular-user subsample to extrapolate from this to the whole population. This should be explained in detail in the methods section, not just in the discussion.

6. “It is important to recognize that these new estimates are likely to be conservative estimates and subjected to measurement and reporting bias. The narrow window in which the binge drinking data were captured i.e. restricting to consumption in the week prior to interview will undoubtedly underestimate the true number of parental binge drinkers, particularly among episodic heavy drinkers.” The argument is somewhat unclear to me. Surveys will not capture some who did not binge drink that particular week, but they will equally capture others who binge drink this week only but not at other times, e.g. because they had a birthday. Would this not even out at a population level?

Minor essential revisions

1. “Since women are less likely to access treatment”—this is a controversial issue. My reading of the evidence is that similar amounts of evidence points to an overrepresentation and an underrepresentation of women in treatment, and no definitive study has yet been undertaken. My understanding of the cited Stewart article is that this relates to residential treatment only.

2. Age of child: If at all possible, the age of children should be considered. It is a qualitatively different situation if the parent of a 15 year old has a binge whilst out
with friends than when a lone parent of a 4-month old does (as a minimum I would expect an acknowledgement of this in the discussion). The authors should probably say why age 16 was chosen as a cut-off point.

3. “Whilst not a measure of problematic use, these estimates exceed the Hidden Harm estimate of 250-350,000”. Bt of an odd sentence: As the Hidden Harm estimate is specifically based on problem users, we would naturally expect an estimate that includes non-problem users to be higher. It is interesting to note that the estimates for children living with hazardous or dangerous drinkers are actually lower than current estimates (this might be an important discussion point?).

4. I am missing more discussion of some of the most plausible, but indirect harm mechanisms: health effects on parents, including premature mortality, financial harms through unemployment.

5. “Assessing the number of children who may be exposed to parental substance misuse is a challenging task”. I suggest replacing assessing with “estimating”

Discretionary revisions

1. In addition to the reference to the ACMD report Hidden Harm, the authors might want to consider reference to our more detailed scientific journal article underlying this work (Meier et al, Addiction, 99, 955–961) because this paper includes details on multiple risks that may provide relevant background to the current manuscript. Generally, the literature review of prior work on levels of drinking/drug use and child harm is not as strong as could be.

2. HSE/HSfE – use of consistent acronym

3. “Alarming” sounds more like media headlines than academic paper.

4. The second paragraph of page 10 is starting to feel somewhat “long-winded”.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.