Reviewer's report

Title: Validating estimates of problematic drug use in England

Version: 2 Date: 5 April 2007

Reviewer: Li-Tzy WU

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General

Study Aim -- The aim of the current study is to determine the face validity of the 2001 MIM estimates of problematic drug use (PDU) and injecting drug use (IDU) for the 149 DATS in England.

Abstract –

Background –

- Page 3: “However, direct methods (such as survey) of ascertaining the actual number of drug users in the country are unreliable due its illicit nature.”

This sentence seems to be too strong and needs clarification.

- Page 3: “Thus, if a ‘capture’ sample of 200 animals are marked and released and a recapture’ sample of 100 contains 10 animals which are marked, the estimate for the total population would be 2,000 (i.e. 10:100=20:200).”

It looks like “(i.e. 10:100=20:200)” should be “(i.e. 10:100=200:2000).”

- Page 4: “The definition of problematic drug use was ‘current use of illicit opiates, crack-cocaine or benzodiazepines’. The definition of injecting drug use was ‘current use of any illicit drug where injecting was the method of drug administration’.”

Does “current use” mean past week, past month, or else? Is there a specified, consistent timeframe of current drug use for all anchor points?

Results –

- Page 8, first paragraph:

The finding that “only 23% reported “about right” should be made clear here.

- Page 10, first paragraph: “It is worth noting that 6 of the DATs who thought their MIM estimate were either ‘too low’ or ‘too high’ compared to the MIM estimate, actually had estimates within 10% of the MIM estimate (see table 8).”

The proportion for “6 of the DATs” should be added to text. There is no table 8.

- Page 10, first paragraph: “DATs with their own estimate had significantly higher MIM IDU rates than those without estimates (295 vs. 219, F=2.7, p=0.10).”

The p-value of 0.10 indicates “non-significant.”

- “Figure 2 show the geographical distribution of DATS perception of their MIM estimate for problematic drug use.”

This sentence could be moved to the ending of the first paragraph on page 10.
Discussion –

· Page 12: “Among responding DATs (N=90, response rate=60%),…”

The response rate (60%) is low, and additional comments on this rate could be helpful to readers.

· Page 13: “Of the 31 DATs who had their own PDU estimates, 24 of these were higher than the MIM estimate while 7 were lower. Of the 20 DATs who had their own IDU estimates, 17 of these were higher than the MIM estimate while 3 were lower.”

The discrepancy between DATs’ own estimates and MIM estimates is high here [24/31= 77%, and 17/20= 85%] and deserves commenting on it.

· Page 13: “This is the first study to validate estimates of problematic drug use in the UK. The survey results indicate that the MIM method produced valid results for over half of the DATs who responded to the survey (64% for PDU and 52% for IDU)”

This sentence may be too strong. If excluding the ‘didn’t know’ category from this number, the corresponding numbers are 40% and 25%, respectively (64%-24%=40%; 52%-27%=25%).

Conclusions –

· Page 14: “The results of the survey indicate that the MIM estimates of problematic and injecting drug use have, with certain caveats, acceptable face validity.”

This sentence needs clarification for two reasons. The agreement in estimates between DATs’ own and MIM is low. The proportion of reporting “about right” categories is not high (33%, 23%).

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Declaration of competing interests:

'I declare that I have no competing interests