Reviewer’s report

Title: A one-year observational study of all hospitalized and fatal acute poisonings in Oslo: Epidemiology, intention and follow-up

Version: 1 Date: 29 June 2012

Reviewer: Kai Knudsen

Reviewer’s report:

This study reports the epidemiology of all hospitalized acute poisonings in Oslo during one-year, including mortality, intention, and follow-up referrals.

Here are some minor remarks.

Major Compulsory Revisions

1) Abstract conclusions: “Opioids were the leading cause of death, so more follow-up should be encouraged among substance abusers.” Question: Follow-up is recommended but do we know if it helps? Does the results from this study present evidence that more follow-ups are needed?

2) Methods, inclusion criteria: In cases where ethanol and trauma were co-diagnoses, or in doubt, a blood alcohol concentration of 54 mmol/L (250 mg/dL) was used as cut-off. Why was this level used as a cut-off? Is it arbitrary? Any references?

3) Conclusions: “In total, 46% of the patients had a suicidal intention, compared with 35% in 2003.” Was the same method used in 2003 for assessment of suicidal intention with the SIS-score? Please clarify.

Minor Essential Revisions

4) Abstract conclusions: “The incidence of hospitalized acute poisonings was high in Oslo and there was an equal sex distribution.” Question: High in comparison with what?

5) Results, page 12, last paragraph, last sentence: Eighty-eight (75%) were males and the median age was 41 years (range 18–86), i.e., 41 for males and 50 for females (p = 0.02). Question: what was the range for each sex? Please state.

6) Discussion, Follow-ups paragraph: The proportion of patients receiving follow-ups after a poisoning episode was lower compared with 2003 (75% vs. 82%, p < 0.001). Question. Receiving follow-ups, was it received or referred to follow-up? I guess referred but not received?

Discretionary Revisions

7) Abstract. Second sentence: “including mortality (inside and outside hospitals)” may be changed to “including mortality”. Parenthesis deleted.

8) Abstract, methods. “All deaths by poisoning outside hospitals were registered
at the Institute of Forensic Medicine.” Question: Were deaths inside hospital not registered and included in the data by the Institute of Forensic Medicine? Please clarify.

9) Methods, inclusion criteria: “All adults (#16 years) presenting consecutively with a primary diagnosis of acute poisoning were included consecutively from the five hospitals.” May be changed to “All adults (#16 years) presenting with a primary diagnosis of acute poisoning were included consecutively from the five hospitals”

10) Discussion, Paracetamol paragraph: “OTC paracetamol accounted for 82% of the acute poisonings, but only 58% of the total paracetamol doses sold in Norway in 2008”. Could be changes to “OTC paracetamol accounted for 82% of the acute poisonings with paracetamol, but only 58% of the total doses sold in Norway in 2008”.

11) Results Table 1: It is interesting that males had more poisonings with ethanol, opioids, GHB and amphetamine. Females had more poisonings with neuroleptics and antidepressants but not benzodiazepines. Would be nice to find a comment in the discussion of this finding.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

'I declare that I have no competing interests’