Reviewer's report

**Title:** Suicidal intention, psychosocial factors and referral to further treatment - a one-year cross-sectional study of self-poisonings

**Version:** 1  **Date:** 16 October 2009

**Reviewer:** Jess Fiedorowicz

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The authors present a large, representative, cross-sectional study of 908 hospital admissions for self-poisoning in Oslo. Strengths of the study include a large sample of all such admissions during a one year period from multiple sites. One weakness of the manuscript is the presentation of large volumes of descriptive data, which may obscure focus and the key findings. The two most notable findings of the manuscript appear to be:

1) The striking similarity between those self-poisonings identified as suicide attempts and those described as “appeals.” This is a very important finding as it suggests, at least based on the cross-sectional clinical and sociodemographic factors assessed, identified intent does not well delineate distinct groups.

2) Patients with self-poisonings to substance abuse are less likely to be provided follow-up plans for discharge. This highlights an important apparent health care disparity.

The authors appropriately highlight these two findings in their abstract and conclusions though these findings do not appear adequately highlighted in the body of the work. The conclusions very well capture these highly relevant findings.

**Major compulsory revisions:**

A1) The terminology applied by the authors is somewhat unique and even varies through the manuscript. To avoid confusion, consider use of consistent terms for the three groups throughout and avoiding terms such as “suicidal.” The term “appeal” may be as problematic as the once popular term “gesture.” Care should be taken in choice of terms and these should be clearly operationally defined in the methods. For instance, does substance-abuse related poisoning reflect the substance used for self-poisoning or the primary diagnosis of the individual involved? The authors ultimately lump “definite suicide attempts” with “possible suicide attempts.” Perhaps it would be simplest to just initially delineate the group as “suicide attempts” which are defined as possible, probable, or definite self-poisonings. It is also not clear precisely how an “appeal” is delineated from a “possible suicide attempt.” This may involve clarifying the operational definition of the term and even renaming it accordingly.

A2) The results and discussion sections in particular could be better focused and organized. Refitting the discussion into a more traditional format may prove...
helpful.

Minor essential revisions:

B1) It is really quite impressive that the authors were able to capture “all patients contacting health care services because of self-poisonings in the capital of Norway.” The authors present data on “all hospitalized.” Is there any data on what proportion of those presenting with self-poisonings are admitted? Also, to clarify, did only one patient refuse to participate? How could the participation rate be so high? Were participants paid? Consented?

B2) The results section could be better focused, particularly with the volume of tabular data presented. This may facilitate the authors focusing on the main findings. Without presenting general population data from Oslo, the internal comparisons (i.e. between the three primary study groups) seem much more relevant to external comparisons to the study base (particularly without the reporting of any general population data).

B3) Discussion, paragraph 2. Please consider changing “partly on the patient’s intention” to “partly on the patient’s reported intention.” Given the statement regarding “ambivalence” being characteristic of suicidal behavior, does the term “appeal” seem appropriate? Should we perhaps simply be characterizing this as low intent versus moderate to high intent? The last three sentences of this paragraph are somewhat inconsistent and unclear.

B4) Discussion, paragraph 3. The discussion about social integration is interesting. While presumably unemployment in Oslo is not 2/3, these external comparisons could perhaps be bolstered by some data which compares to the study base (population of Oslo).

B5) Discussion, paragraph 4. Much of this paragraph can be eliminated as it seems to distract from the key finding (less frequent prior attempts in substance use-related poisonings). The next several paragraphs seem to focus on differences between substance use-related poisonings and suicide attempts or “appeals” for a given variable. The key message here seems to be that substance use related poisonings appear cross-sectionally different from suicide attempts while “appeals” do not. However, the individual paragraphs frequently digress. This can perhaps be condensed into a paragraph highlighting similarities and another with differences with comparison to the relevant literature.

B6) Discussion, paragraph 5. “Determined presence of a death wish over a significant time” does not clearly arise from the methods presented. It is not clear what data this conclusion in resting upon.

B7) It is not clear what “those on sick leave” is referring to from the data presented.

B8) Discussion, paragraph 8. The sentences beginning “The gradient of suicidal intent” appears to contradict rather than support the following sentence beginning “Appeals and suicide attempters.” If a gradient of suicidal intent influences risk, than why would the very low intent “appeals” be in the same group as suicide attempters.
B9) Table 3. Please specify what the models are adjusted for in the table legend. How is the crude OR for age 30-49 significant when the 95% C.I. crosses 1.

B10) Table 6. This table seems to be a distraction from the point of the manuscript and could be eliminated.

Discretionary revisions:
C1) Background, paragraph 3. Consider replacing “fundamental principle” with “challenge” since the preceding data suggests this is difficult to do. Later consider replacing “repetition” with “repeat attempt” for clarity. Reference 12 appears to be a key reference for a main finding and perhaps should be expanded.

C2) The correlation between current and past psychiatric treatment does not seem useful. Consider removing.

C3) Discussion paragraph 9. 67% not referred does not seem to similar. It represents a 3-fold higher referral rate. Consider re-wording.

C4) S&L, paragraph 1. Consider replacing “in order to generalize from the study population” to “to facilitate comparison of study sample.” In paragraph 2, consider replacing “bias” with “limitation” and “possible” with “easier.”

C5) Table 1. Consider combining “well not tell” and “unknown” columns.

C6) Table 2. The unknown rows could also be listed as a percent for consistency.

C7) Table 7. Please include OR in column header. A very impressive finding regarding the no referral frequency with the substance abuse group. Again, I think this warrants more emphasis and discussion.

Level of interest: An article of importance in its field

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

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.