Reviewer’s report

Title: The global distribution of fatal pesticide self-poisoning: systematic review

Version: 2 Date: 21 September 2007

Reviewer: Martin Voracek

Reviewer’s report:

General

This systematic review advances our knowledge relating to the contribution of fatal self-poisoning with pesticides to suicide mortality around the world.

The topic is underresearched. The current contribution is worthy publication.

In particular, the tables do a good job, and the maps are informative - fine.

-------------------------------------------------------------------------------

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

None.

-------------------------------------------------------------------------------

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

Emphasize more the disparity of the proportions of all suicides using pesticides around the world (Europe: estimated 4%; Western Pacific Region: estimated 50% or over). This, along with the disparity in populations (Europe vs non European world regions) explains the respective global burden figures better (pesticides are infrequently used in Europe, which, in an international perspective has high suicide prevalence, but not the largest population, whereas pesticides are frequently used in the developing countries of Africa, Central and South America, and Asia, most of them having lower suicide prevalence, but with the most populated countries located in these latter world regions).

Mention that hanging is the most frequent suicide method employed, in an international perspective, and the availability of this method cannot be eliminated (which is also true for jumping, another frequent suicide method, which appears to be more prominent among women than among men).

Pesticides are not the "most common method of suicide worldwide" (p. 4, para 2).

Acknowledge that several figures included for this systematic are quite dated (1970s or 1980s; e.g., p. 9, para 2, or p. 11, end of para 3), and that there are
disparities in the year (or the period covered) of suicide statistics that make up the database for this review.

P. 11, para 2: "pesticides make an important contribution ... to morbidity and mortality...". Better substitute with "mortality from suicide".

Be clear on technical terms from suicidology (suicide attempt and [deliberate] self-harm appear to be used interchangeably and synonymously).

Emphasize more the evident gaps in the accessible literature on this topic. Out of several hundred reports, located by the literature search strategies and considered, only 27 could be included as eligible and informative for this systematic review (authors' flowchart, Figure 1). By the way: this Fig. 1 appears twice in the ms.

Introduction and Appendix A, description of the literature search strategies: governmental sources, such as statistical yearbooks (vital statistics) of the countries were apparently not retrieved and consulted. To do so may be cumbersome, but could identify important data not available elsewhere. - I give one example: on the occasion of a visit to Mauritius some years ago, at the library of the School of Social Sciences and Humanities of the University of Mauritius at Reduit, among other I had the opportunity to scrutinize the following accounts -

Island of Mauritius – Health Statistics Annual: report of the Principal Medical Statistician. Port Louis (Mauritius), Ministry of Health and Quality of Life [various yearly volumes].


These accounts contain detailed suicide statistics, including a yearly breakdown by sex and by method. The proportions of suicide due to self-poisoning with pesticides could be extracted from these or similar sources. - Mauritius is one African country not covered in the present systematic review.

Lack of retrieval of governmental sources (and other, such as unpublished theses and dissertations at the various local universities in the developing countries) should be acknowledged (Appendix A: search strategy). Also, the International Academy of Suicide Research (IASR; http://www.depts.ttu.edu/psy/iasronline/) and the respective national representatives of the IASR (for clarity and completeness, I am not one) apparently have not been contacted. That may well have helped in locating further pertinent data.

Discretionary Revisions (which the author can choose to ignore)
None.

**What next?:** Accept after minor essential revisions

**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.