Reviewer's report

Title: Association between mortality from suicide in England and antidepressant prescribing: an ecological study

Version: 1 Date: 18 October 2004

Reviewer: Andrea Mant

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General
This is a useful and clearly presented paper adding to the growing literature teasing out the relationship, at the population level, between suicide rates, antidepressant class, and increasing antidepressant utilisation. They conducted a simple correlation analysis of antidepressant dispensing rates (not age specific) and age standardised rates from two national data sources. Over a ten year period they note falling suicide rates and an inverse correlation with increasing use of antidepressants found in several (but not all) countries.

The authors add to previous analyses by accessing, in addition to the register of deaths by suicide, antidepressant related deaths from the drug poisoning mortality database (poisons register) for England and Wales. They found that these were also inversely correlated with antidepressant prescribing rates. They note fewer deaths from tricyclic poisoning over time and more from the “newer” antidepressants (SSRIs etcetera). As they point out this presumably reflects the very marked change in use of the latter and the fall in use of the tricyclics. They rightly address the limitations of their analysis and the specifically the way in which the drug involved in the poisoning death is likely to be recorded. They raise the issue of alternative explanations such as alcohol and unemployment, but have not discussed what those trends have actually been (unlike Isaacson and Hall et al – refer 5 and 6 in the paper).

Specific comments:
1. On page 7/16 the authors mention that they accessed data on hospitalisations for drug poisoning – however no such data are presented. Please clarify.
2. Presumably the suicide and drug poisoning data are mutually exclusive – ie a death is classified in one category only.
3. Could they have strengthened their analysis by estimating values for age and sex specific prescribing rates to address the issue of whether the correlations differ by age and sex? Cf refer 6 methods
4. Table 2 legend: it is not clear in the legend that the correlations are for rates.
5. Can they comment on the literature attesting to the direction for the England & Wales alcohol consumption and unemployment rates either as total or age-specific?

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

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

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Discretionary Revisions (which the author can choose to ignore)