Reviewer's report

Title: Estimation of the real population and its impact on the utilisation of healthcare services in Mediterranean resort regions: an ecological study

Version: 1 Date: 20 July 2006

Reviewer: Gerard Bury

Reviewer's report:

General

1. Is the question posed by the authors new and well defined?
   The use of Municipal Solid Waste (MSW) ratios as a marker of true population size is innovative and potentially valuable as an epidemiological and health planning tool. The paper is ambitious in scope but introduces novel strategies and clearly defines its aims.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?
   The methods used to calculate MSW ratios and to argue for the selection of the most appropriate ratio seem appropriate. The authors then move on to correlate these figures with the use of hospital emergency services throughout the year by "registered" and "unregistered" populations. I am unclear if the latter correlation is completely acceptable as, for example, either of these populations might seek other sources of care. The use of other health care facilities in primary care or the private sector might be alternative routes to care by these populations and should be commented on by the authors. The statistical analysis seems appropriate.

3. Are the data sound and well controlled?
   Yes.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   Yes.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
   Yes. The authors might consider widening the discussion to explore the implications of their methodology for other parts of the EU, given the availability of EU MSW data within the EUROSTAT system.

6. Do the title and abstract accurately convey what has been found?
   Yes.

7. Is the writing acceptable?
   Yes.

Comments

I think this is an interesting and innovative paper which has potential to be introduced as a public health strategy in many regions with mobile populations. The paper is clear and to the point and should be published by your journal. The authors might consider minor amendments as discussed above.

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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)