Reviewer's report

Title: Persistent socioeconomic inequalities in cardiovascular risk factors in England over 1994-2008: a time-trend analysis of repeated cross-sectional data

Version: 3 Date: 6 September 2011

Reviewer: Bruna Galobardes

Reviewer's report:

I thank the authors for answering my last two queries. If allowed by the journal I would make the results that exclude the health domain of the IMD available online. In terms of the choice of socioeconomic indicator I genuinely do not understand why the best data, easily available, is not being used. I am happy to accept that I disagree with the authors on this one and the editor can make a decision. The authors argue that it allows comparisons with inequalities in CHD but no such comparisons are presented or even discussed in this article. I judge the article as an independent piece of work and as such I don’t think is using the best data available. The result of this is that the inequalities are underestimated (assigning average area level to the individuals reduces the variability of the exposure variable therefore underestimates the association between risk factors and socioeconomic position). They also argue that there are contextual effects, which as I have mentioned I do agree with, but the work presented in the article is on individual not area level effects (if area level effects were of interest they should have used proper multilevel analysis to investigate that). They also argue that area level measures are better for old age, which is an interesting point, but their sample is not of an old age. In addition, using the available individual level indicators would also solve the problem highlighted by Sam Harper of the timing of SEP measures.

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'