Reviewer's report

Title: The impact of economic downturn on maternal and infant mortality: lessons from history

Version: 1 Date: 31 March 2010

Reviewer: Barbara Starfield

Reviewer's report:

Major Revisions
The major problem with this paper is the absence of concordance between the title of the paper (Economic Downturn) and the analyses (which deal with GDP per capita). At the very least, the authors need to defend why they use GDP per capita as a proxy for economic downturn.

Another problem is the apparent failure to control for major confounders and the extent to which they are similar or different in the different countries.

The recommendation to 'increase external assistance' also seems extremely simplistic in the light of the likely existence of different influences on the health measures in the different countries. The recent paper by Stuckler et al (PLOS Medicine 7(3)March 2010) is instructive in this regard, as it shows that developmental assistance must be more general rather than in the current situation of disease-specific assistance, and indicates that GDP growth is not as important a detriment as is general morbidity burden and disease interactions.

In brief, this paper lacks any insights as to why the countries vary so much in the relationship between GDP per capita and health change and what this all has to do with 'economic downturn'.

Other issues:
Abstract, Conclusions: Do you mean least wealthy (or lowest middle income) rather than 'poorest'?

Penultimoate sentence of first paragraph of Health Outcomes and Incomes: please delete the 'etc', as readers have no idea what you mean by this.

Methods, first paragaph, second sentence: made available to the authors by whom?

Lag period: What is the justification for 5 years? Infant mortality responds more quickly than this. Surely, many mortality indicators are available annually.

Results, second sentence of first paragraph: what 'former two'?

Third sentence of Results: What three countries? You named only two (Japan and Canada)
Discussion: What do you mean by 'all emergencies--like those arising during pregnancy and childbirth-havin access to care'? I doubt that most people will agree with the assertion in this sentence.

**Level of interest:** An article of limited interest

**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.