Reviewer's report

Title: Determinants of unequal access to preventive care in China: a multilevel analysis of a cross-sectional household survey

Version: 2
Date: 27 November 2015

Reviewer: Peter Goldblatt

Reviewer's report:

Major compulsory revisions

1) The authors point to the limitation of the data in only recording use of preventative services over the four weeks before interview. Despite this they frequently refer to the study highlighting low use of preventative services. But that raises a question of what constitutes an appropriate use of such services in a random 4 week period. If annual use were appropriate, then a four weekly figure of 7% would be about right. The value of the study is the emphasis on inequality - and that should replace comments on low usage. What would be sensible and in line with comparable studies, would be to estimate what level of usage would be required in disadvantaged groups to level up access.

2) Given the unspecified nature of the preventative services that were self-reported, the higher usage by those with current illness raises the possibility that some usage was illness related and therefore hardly upstream prevention. This deserves some caveat at least. It would be interesting (but not essential) to undertake modelling on the currently healthy sub-sample.

3) Greater clarity is needed on the value of a general physical examination in those who are symptomless. As in (2) above, it is appropriate as diagnostic tool among those with current ill health or symptoms - but that is very downstream and a pre-requisite for treatment.

Minor revisions

4) The core of the paper is Table 4. It would be helpful to list models A, B, C and D in the statistical methods section (rather than burying them in a descriptive paragraph as first second, third and forth). This would assist transparency of a complex multilevel modelling process.

5) The statement on page 26, line 482, that increasing disparities in health are the result of increased health expenditure by better off consumers is not based on evidence. The role of an increased Gini coefficient on social, economic and environmental conditions in society that are associated with the risk of disease - irrespective of treatment received. Of course, inequalities in health care have a role in inequalities. But this varies between three and fifty per cent depending on how far the country is from achieving universal basic provision.
6) Some clarification is desirable over the relationship between the different health insurance schemes and the other social protection and income benefits available to the insured. For example UEBMI is related to public employment (page 27).

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I have received funding from the World Health Organization in recent years to review inequalities in health and healthcare provision.