Reviewer’s report

Title: The global effect of maternal education on complete childhood vaccination: a systematic review and meta-analysis

Version: 0 Date: 20 Aug 2017

Reviewer: Saliu Balogun

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This is a valuable review that synthesise evidence from studies examining the association between maternal education and complete childhood vaccination. The authors found that the odds of complete childhood immunisation were higher in children whose mother had secondary school or more education compared to those whose mother had no education. However, I have some methodological concern with the manuscript.

Major comments

- In the meta-analysis maternal education variable was dichotomised i.e. "none/primary" and "secondary/higher". Consequently, in papers where the results are presented as "illiterate versus literate", "not educated versus educated", the 'educated' and 'literate' variable was classified as "secondary/higher". Categorising 'literate' mothers has having secondary school or more education may not be optimal for developing countries, particularly sub-Saharan African countries where mothers with several years of education are 'illiterate' (unable to read at all). Please see the following references: Smith-Greenaway, Emily. "Educational attainment and adult literacy: A descriptive account of 31 Sub-Saharan Africa countries." Demographic Research 33 (2015): 1015; Smith-Greenaway, Emily. "Maternal reading skills and child mortality in Nigeria: a reassessment of why education matters." Demography 50, no. 5 (2013): 1551-1561.

- The authors could perform a separate meta-analysis considering only the papers that examined the relationship between complete immunisation in children with literate vs illiterate mothers. Such analysis may be of public health relevance in developing countries as it could provide some evidence to support the call for policy measures to establish functional and quality education that promotes literacy rather than just increasing school enrolment.


Minor comments
In the meta-analysis maternal education variable was categorised into "none/primary" and "secondary/higher". However, the authors conclude that "Overall, analysis showed that the odds of full childhood vaccination were 2.3 times greater in children whose mother received secondary or higher education when compared to children whose mother had no education." Whereas the reference group was none/primary school education, please clarify.

Some of the sentences could be made clearer. For instance, "The data set was divided into two groups, ≤2000 or >2000 (p. 5, line 115)" based on the year the study was conducted?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
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Unable to assess

Are the conclusions drawn adequately supported by the data shown?
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Yes

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