Reviewer’s report

Title: Health status in a transitional society: urban-rural comparisons from a dynamic perspective in China

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Reviewer: Liying Luo

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Review of Population Health Metrics 17-00082

Comments to Authors

Using the 2005-2013 Chinese General Social Survey data, the research in question focused on temporal variation in self-reported health among rural and urban Chinese residents. The authors used the cross-classified random effects models (CCREM) to separate total changes into age, period, and cohort (APC) variations. They found distinct age, time period, and cohort patterns in health between rural and urban residents. The authors clearly described their data and results. However, I have concerns about the validity of the method that they used. As a result, I remain skeptical about their empirical conclusions. I described my thoughts below.

First, the manuscript would benefit from a compelling theoretical front end to motivate the study. The urban-rural disparity is certainly an interesting topic, but simply exercising a method that has not been widely used in a research area does not automatically warrant a contribution. The authors need to be clear about what an APC analysis would contribute the literature.

Second, the authors briefly mentioned the difficulty in identifying APC models, but apparently were not updated with new methodological discussions in this area. They claimed that "with the development of statistics technology, this conundrum has been solved reasonably" (page 4). They also believed that CCREM "could not only remedy the limitation that the confounding of age and cohort effects in cross sectional studies, but offset the limitation of most previous longitudinal studies that only considering period effects but overlooking the cohort effects" (page 14). These statements are misguided. Recent research has shown that the CCREM cannot solve the identification problem (see, e.g, Bell and Jones 2014, 2015a, 2015b, 2017; Luo and Hodges 2016). It means that the estimated APC effects from a CCREM, like all other APC models, are arbitrary without theoretical justification. Because the substantive conclusions in this research entirely depend on the methodological validity of the CCREM, I remain unconvinced about their conclusions about temporal variations in health. Assuming that they would continue to be interested in using APC methods, I highly recommend the authors to read closely the methodological work mentioned below.

Reference


———. 2017. "The Hierarchical Age-period-cohort Model: Why Does It Find the Results That It Finds?" Quality & Quantity 1-17. DOI: 10.1007/s11135-017-0488-5


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