Reviewer’s report

Title: Referral patterns through the lens of health facility readiness to manage obstetric complications: national facility-based results from Ghana

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Reviewer: David Goodman

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There are times in peer-reviewed literature when the obvious needs to be supported by rigorous methodology. I feel like this is one of those times. The authors report that referrals are common in lower-level facilities, but that district hospitals can manage most complications that are referred to them. They highlight that they are capable of providing care beyond their perceived preparedness. The authors also clearly document that most hospitals are not ready to manage serious obstetric emergencies.

This paper will be valuable to policy makers in Ghana and countries considering making improvements to similar systems for emergency referral. They highlight important gaps in policy implementation for programs such as the NAS and NHIS.

I am concerned that they only captured a 9% complication rate in their study sample. I typically see a 15% complication and referral rate cited which comes from WHO, UNICEF, UNFPA, World Bank. Trends in maternal mortality: 1990 to 2010. Geneva: WHO; 2012. http://www.unfpa.org/public/home/publications/pid/10728. Accessed April 3, 2014. I recognize this paper is a bit dated and based on projections rather than methodical counting as done in this study. The authors state that there methodology would tend to over-count referrals, but the discrepancy raises questions that perhaps some referrals were missed.

I would like for the authors to specify how the facility readiness was assessed. They state on line 16 page 6 that data collection instruments were used. It is not clear whether data collectors visited each hospital and directly observed the items on the data collection instruments or if hospital administrators filled out the instrument. It is commendable that they made an effort to ensure that a person capable of using the resources related to a signal function was present.

This paper highlights two important points: the lack of complete preparedness of the top-level facilities, and the lack of communication capabilities in several high-volume referral centers.
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