Review of: "Lassa Fever cases suffer from severe under-reporting based on reported fatalities"

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Potential competing interests: No potential competing interests to declare.

This article draws attention to a serious issue in disease surveillance. Although the current article focuses on Lassa fever, the underlying principles could be used for many other zoonotic diseases. I enjoyed the focused approach of this article and believe the outcome will be useful in surveillance and (hopefully) eventual control of this deadly zoonotic disease.

Overall, the extrapolation methods used appear intuitive, but I have a few major concerns:

1. The last sentence of the Results section states that 'CFR has been treated as spatially non-varying . . .', but 'treated as' is not this same as 'is'. This is a huge assumption, especially for an RNA virus capable of rapid mutation over a large geographic area.
2. As an extension of point 1, this article assumes that the only reason why CFR could vary among countries is because of differences in reporting and monitoring. I understand you have to make some assumptions in order to run your analyses, but some discussion recognizing the assumption of these values and how they could change with looser assumptions would be beneficial.
3. Can you explain how the higher surveillance in method 3 was conducted (e.g., community serology?)? Method 2 mentions contact tracing, so I'm curious what ways the surveillance was broader/better in method 3, especially since method 3 is what you ultimately base everything off of. Stated differently, what's your explicit rationale for using method 3?

I have several other concerns and notes with varying degrees of significance:

1. A lot of the points made in the intro should have citations but don't. I read in a comment to a different review that you were limited to 5 citations for submission, but this isn't a valid reason to plagiarize. Either reword the intro so that you can avoid certain statements or find an article that covers multiple points.
2. Fig. 1A has a lot of empty space at the bottom. Use some of this to separate methods 1 and 2 more.
3. Color palette is not color-blind friendly. It's not a huge deal since it's very easy to follow this figure and there aren't areas where colors overlap.
4. The last sentence of the second-to-last paragraph of the Results sounds like there are three separate pieces of information, but really its 2 pieces of information and a third that is a product of those first two. You could reword this to: 'During the last decade, 5,230 of the expected 8,995 expected Lassa Fever cases have been reported, resulting in an estimated 3,765 unreported cases.'

I wanted to reiterate that I did really enjoy this paper and find it quite valuable, and it's because of that that I would like to see some of these issues addressed/explained.