Reviewer's report

Title: Health and Demographic Surveillance Systems: A Step towards Full Vital Registration in Sub Sahara Africa?

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Reviewer: J. Ties Boerma

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The paper has improved. It however still suggests in several places, including the title, that HDSS or SVR are alternatives to CRVS. For instance, in the abstract it says: “... in the absence of an adequate national CRVS, HDSS serve as a viable and reliable alternative that provides a sample vital registration system...” This is not the point that the paper should be making. The point is that CRVS development will take time and that HDSS sites should be used better to generate relevant public health data in the meantime.

The following changes are proposed:

The title of the paper is not right. It would be better to say something like: Using HDSS to bridge the gap in mortality statistics in SSA.

Section on CRVS – this section is ok, could perhaps connect better with the current efforts of UNECA and ASSD, including the upcoming Minister’s conference. It should also do justice to South Africa where fairly reliable vital statistics are generated from the CRVS in spite of not having complete coverage.

Section on intermediate (not alternative sources of data) – HDSS – section is ok, points out most important challenges for the purpose of filling the data gap, without having the pretention that this is a source of reliable national mortality statistics. It would be good to include more examples of situations where HDSS mortality trends (by cause or not) are good markers of national progress. A good example is Tanzania where the HDSS child mortality trends captured the decline before the household surveys did.

Other health indicators generated by HDSS – although this is a relevant function of HDSSs it is not a point that is relevant to the paper. There are several examples where HDSS generate very critical epidemiological information on for instance HIV trends, but that is not information that would be captured by a CRVS, so it is not really relevant to the paper. The focus of the paper should be exclusively on improving mortality statistics.

Birth registration or fertility estimates, the other major vital statistic generated by CRVS, are not discussed. CRVS coverage is much higher than for deaths in many countries, but not sufficient to estimate fertility. The paper should say a bit more about this.
The section on SVR: The paper focuses on the role of HDSS (and indeed the conclusions of the paper spell out extensively how the HDSS can be used better) and deal with its main challenges of intervention effects, speed of generation reliable mortality statistics, link with national decision making processes etc. The argument should also be made more prominently that a larger number of HDSSs is better than having just one. The SVR section is now very short – which is fine but it should address the key issues. It should discuss the common concern that it could either stimulate or compete with the development of a CRVS. Does SVR indeed involve the same resources as CRVS strengthening? In countries with limited capacity and resources, how can it be run without affecting the CRVS development, how can it stimulate such development? Also, what should be the role of external funding?

It seems to me that the VA section should be part of the HDSS section, not part of the SVR section.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

'I declare that I have no competing interests'