

# Review of: "A Review of the Processes and Procedures of Road Traffic Accident Mortality Data Collection in Zambia"

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This is a well-written paper discussing an important topic, and the research is new and illuminating. I have a number of comments, however, which I hope will shape the paper more.

Importantly, I think there is some more work that needs to be done to expand and provide more detail in the methodology section. In the findings section, I think it would be good to present the results thematically rather than by organisation, but that is your choice. I think there is information omitted on the 'missing data' referred to in the discussion.

It will be important to identify the numerical discrepancies in RTC and injuries and deaths between sources of data. However, near the end, I realised that in fact this is perhaps a qualitative follow-on paper after Mwale et al. (2023), which I think presents the numerical data on under-reporting that is relevant to this study. Is that the case? If so, the paper definitely needs to be framed to reference back properly to this previous paper. Ideally, you would just super-summarise the under-reporting findings of the earlier paper in a single table so the reader has an idea of the scale of the problem (without needing to root out the other Mwale citation).

## **Abstract.**

The abstract is good, but the single line of results ("The study identifies key challenges such as paper-based records, inadequate training, resource limitations, varying case definitions, and low death registration rates.") should be expanded to be more precise and comprehensive. For example, what is the death reporting rate? What is the problem with paper-based data? What is the current resource level? For what reasons is it being described as inadequate? Expanding this would require some of the previous introductory sentences to be redacted, and I think that is quite possible. You use the word 'crucial' twice in the abstract. This comes across as over-emphasis. I do accept they are 'important', or even perhaps 'very important' though.

## **Introduction.**

I think the WHO 2019 report may now have been superseded by the WHO 2023 report.

You use the word 'staggering'. Again, to a technical reader, this comes across as over-emphasis to me. It is more powerful to 'let the facts speak for themselves'. There could be other adjectives or adjectival phrases that are more helpful to the reader to interpret the number, such as 'a large majority'. The word 'alarming' occurs soon after. I will stop now commenting on adjective choice, but you may wish to read through the manuscript and self-determine whether there are

other adjectives which might be better chosen.

The paragraph starting “However, road traffic crash data collection...” is long. I think there is a natural move at the sentence starting “A review conducted by the United Nations ...” and at the sentence starting “The African Road Safety Observatory...” and there could be new paragraphs, possibly at these two points.

## Methodology

The reader needs to know some numbers relating to the number of stakeholders interviewed, documents reviewed and their type, and number of key informant interviews. How were the meetings and interviews transcribed? How were the transcriptions analysed? Some tabulations of numbers, organization names, and so on would be helpful to the reader so they can better understand the scale and scope of the study. The time-motion studies are interesting, and again, more detail is needed on how these were undertaken for a paper like this.

## Findings

You begin now to provide some data in narrative form that I was referring to in the methodology section comments above. I think it would be better for the reader to have a ‘blink of the eye’ view in the methodology of all of this before reading the findings. In a sense, you are slightly mixing up the methodology and the findings.

You list “Some shortcomings” of the Zambia police. Why do you not report all the shortcomings? Or are these all the shortcomings? In which case, why do you say ‘some’? The reader wants to be presented with a comprehensive summary of all the findings.

Linking back to my comment in the methodology above about the method of analysis of the documents and transcripts, for a study such as this, a thematic analysis might usually be used. The bullet list of findings for the Zambia police seems to be in a non-thematic order. For example, the last bullet refers to records, which the first bullet deals with as well. It will probably be helpful to classify each point into the themes that emerged from the analysis.

Figure 1 does not seem to be referenced in the text. So why is it there? It seems as though this is a useful factual background to how the police operate. On the basis of the mantra ‘fact first, evaluation second’, should you not introduce the figure as the modus operandi of the police, and then follow this with the findings? You can then more easily link comments back to the stages noted.

For the health care facilities section, I think it should be a comma rather than a full stop after the first occurrence of the word ‘clinician’. I do now wonder why you are reporting findings for each part of the system. Would it not be better to regard every actor as being part of a whole system and report the findings collectively, but then indicate to which organisation they refer? I say this because I think there are common themes across organisations (e.g., paper records).

I also wonder whether your Figure 1 could be expanded to include a flow chart that includes both the health and civil register functions. That may reveal breaks in chains between the organisations?

An overall comment is that if you are basing these findings on transcriptions from interviews and documentary evidence, there are no quotes from participants or from documents. These quotes are the 'findings'; they are the evidence, which you (should) then present in a thematic way.

## Discussion

You start by saying "The basic business process was deemed effective and fit for purpose." It is not clear that this is a finding that came out above. It is not clear what the second part of the sentence means either: "but components from each stakeholder resulted in missed data."

You say "The comparison of the three data sources revealed differences in the number of records contained in each source." There is no presentation of the findings on this point.

As with the findings, you present the discussion divided by data source. You are, in fact, attempting to build a holistic picture of the data, so it would seem probably better to discuss data sources holistically in relation to what they tell you about different matters, rather than dealing with it in this atomised way.

You seem to be presenting the Mwale, et al., 2023 findings for the first time. They should be presented in the literature review in a more detailed way. In the discussion, you need to compare their findings to yours, but you have not presented your numerical findings. I now realise that perhaps this paper is the follow-on to the previous numerical analysis of discrepancies in the previous Mwale paper. I had not realised that until this point. I think the framing of the paper should acknowledge Mwale, et al., 2023 early on and say this is the follow-on qualitative study, if that is the case.

## Conclusion

The conclusion starts by saying "This study analysed the level of underreporting of RTC data by comparing data from the police, hospitals, and the CRVS system." I am not sure it did; that was the previous Mwale et al. (2023) study. I think you have undertaken a qualitative study to understand reasons for possible underreporting previously identified by Mwale et al. (2023). I think that is the case, but I may be losing the plot!

You seem to have a separate conclusion from the first conclusion, which is written after the recommendations. The recommendations look good, and in a sense, I think they, for the first time, reveal to me the themes that I think emerged from the qualitative analysis. It would have been good to start this framing in the findings section, as I note above.

Having said that, there is one recommendation which seems to come out of the blue: "Sensitization and Community Outreach." The question in the reader's mind is: did this really emerge from the research? If so, it needs to be clear in the findings and the discussion.