

Review of: "Prevalence of Buruli Ulcer Among Residents in Jasikan Municipality: A Cross-Sectional Study"

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Potential competing interests: No potential competing interests to declare.

Method

Study Site

In the 2020 population census, about 49.2% of the population were males and the rest were females. The majority of the population live in rural areas, constituting about 72.4%. The Municipality has a sex ratio of 91.9.

I think there's a small error in the M/F sex ratio = $49.2\%/50.8\% = 0.96$

Sample Size Determination

A sample size of 56 respondents was sampled from the study population. The sample size was determined using the method described by Kelsey et al. (1996).

Although the authors cite a reference for calculating the required sample size, the reader would be interested to know the formula used, or at least the parameters and values taken into account in this calculation, and the assumptions made.

Sampling Methods

The study employed a census approach as a sampling technique to collect data from the residents in the study to determine the prevalence of Buruli ulcer among the population. A case search was done in all the communities at Jasikan Municipality to identify cases. All cases who met the inclusion criteria were included in the study.

Here too, we'd be interested to know exactly what approach the authors used to reach the respondents. Was it cluster sampling? Multi-level? Convenience?

Calculation of Buruli ulcer prevalence

The period prevalence = $56/73,263 \times 10,000$

= 0.000764 per 10,000 population

= 8.0 per 10,000 population

The formula used must be explained by the authors. What does 73.263 correspond to? The number of people living in the study area? Also, is this prevalence generalizable or extrapolable given the sampling? If so, a confidence interval for this

prevalence would be desirable.

Discussion

Categories of cases (new vs recurrent) and Duration of lesion have not been discussed.

The relatively small size of the study sample, the fact that no statistical tests were carried out to identify possible links between Buruli ulcer and the characteristics of the respondents, and the cross-sectional nature of the study may be limitations of the study.