

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.

Review:

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

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Introduction: Started well with the identification of first case and then across the various parts of Ghana.

The selection of study site is mentioned clearly.

The research question is unclear. It should state the reason for identifying the prevalence of the disease- You can add a statement like this as it will show what the disease is and the disease burden of disfigurement-

Buruli ulcer is a chronic debilitating disease caused by an environmental Mycobacterium ulcerans. The exact mode of transmission of M. ulcerans is still unknown. Other risk factors of Buruli ulcer include extensive scarring, swelling from fluid retention, and trouble moving your joints. Long-term effects of Buruli ulcer include permanent disability or disfigurement.

The reference for the statement ".....Between 2000 and 2003, about two thousand eight hundred Buruli ulcer cases were recorded in Ghana." Is MISSING

Methodology:

The study site is extensively described

Study population: inclusion and exclusion criteria mentioned

Sample size: It should have been scientifically written by further adding that.....

Using the formula $n = [(Z\alpha/2 + Z\beta)^2 * p(1-p)] / [(p1 - p2)^2]$

Sampling method:

Clearly defined **census approach and case search**

Data collection procedure should have mentioned the various **themes** for data collection

Also mention the type of diagnostic test used to identify the organism at NMIMR ***microscopic detection of acid fast bacilli (AFBs) in stained smears from clinical specimens OR DNA detection by PCR targeting the M. ulcerans***

Ethical consideration and informed consent have been clearly made

Results:

Clearly displayed and explained

It would have been more scientific to show some relations between sociodemographic of participants and the types of ulcers

The study should be able to identify areas with greater and lower than expected prevalence rates (i.e., disease clusters) and associating factors to assist with the development of prevention and control programs.

Discussion:

Second paragraph: your ***statement..... It is possible that the participants could have been exposed to the same risk factors which exhibited the same manifestation on patients confirmed as having Buruli ulcer disease.....***

Kindly indicate the risk factors common in other regions that could be present at your study site.

You should have mentioned the age group the disease affects and related it to your study-It primarily affects children aged 5-15 years

You should also mention **the Infection with the causative agent of Buruli ulcer occurs through the “entrance gate” – abrasions, cuts, insect bites and other injuries can be on the skin---**And relate to your findings in terms of genesis of the lesion amongst your study participants.

Once again the study should be able to identify areas with greater and lower than expected prevalence rates (i.e., disease clusters) and associating factors to assist with the development of prevention and control programs.

The strength and limitations are mentioned and acceptable.

Final Remark: A nice attempt toward one of the neglected tropical diseases. Well done with the research. I believe that with the few corrections, clarifications, data analysis and displaying of the association of possible risk factors could add more meaning to the work. Good Luck.