Reviewer's report

Title: Schistosomiasis transmission at high altitude crater lakes in Western Uganda

Version: 2 Date: 31 March 2008

Reviewer: Giovanna Raso

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Comments to authors:

ABSTRACT

Write schoolchildren instead of school age going children.

“Stool samples from 370 pupils aged 6-18 years in primary one to primary seven were collected and processed using the Kato Katz technique and later egg count per gram of stool done under a microscope in the laboratory.” This sentence needs rephrasing.

“A semistructured interview was used….”. I would use the word questionnaire here rather than interview (if applicable).

“36.7% of the pupils studied used crater lakes as the main source of domestic water and the crater lakes studied were at altitude ranging from 1487-1682 m above sea level and 84.6% of the crater lakes studied were infective with over 50% of the users infected.” Make two sentences out of this one.

If allowed by the journal please use the abbreviation epg rather than eggs/gm. Epg is commonly used in the international literature.

INTRODUCTION

First line: write full name for Schistosoma mansoni, then use only short version S. mansoni.

Please check spelling of Biomphalaria throughout the manuscript. Also, like for Schistosoma, use full name only once for Biomphalaria and then use the short form, i.e. B. pfeifferi, B. sudanica.

MATERIAL AND METHODS

“Stool samples were collected and processed within 1 hour using the Kato Katz-smear technique and later egg count per microgram of stool conducted under a microscope in the laboratory.” Please rephrase this sentence. The sequence is wrong. First the stool samples were collected then processed with the Kato-Katz technique using 42 mg templates (or maybe another template?). Thereafter the eggs were counted on the slides using a microscope. Eggs per
gram (epg) of stool were then calculated.

“13 crater lakes were sampled for absence or presence of snail intermediate hosts for Schistosoma mansoni.” Change the sentence to “13 crater lakes were sampled for the presence of snail intermediate hosts for Schistosoma mansoni.” Additionally, please explain briefly the methodology.

RESULTS

The World Health Organization uses the following infection classification: i) 1-100 epg are light infections, ii) 101-400 epg are moderate infections, and iii) >400 epg are heavy infections. I suggest using this classification throughout the manuscript.

Table 2: Please add a column showing in which of the crater lakes the snails were found.

DISCUSSION

Please add a relevant reference to the first sentence of the discussion. The sentence needs also to be more specific it is not completely clear if the authors refer to the morbidity/disability caused or simply the commonly used diagnostic technique (Kato-Katz) that underestimates especially light infections due to low sensitivity. It would be worthwhile mentioning both reasons. I suggest the following references:

In relation with disability:


In relation with the use of Kato-Katz:


“Early diagnosis and treatment of children shortens the duration of heavy infections thereby reducing the risk of severe disease and childhood mortality.” Schistosomiasis mansoni is a neglected disease that can cause death, however rather than mortality the main problem of this disease is its chronicity. See King & Dangerfield-Chan 2008.