Reviewer's report

Title: The risk of pathogenic intestinal parasites in Kisii Municipality, Kenya: A correlational descriptive research design

Version: 1 Date: 11 December 2007

Reviewer: Jean Kennedy

Reviewer's report:

Abstract

Methods:
Random and systematic sampling used in the selection. Name the sampling technique used for each study sample

Smears were not specifically taken of food handlers but from people at a hospital. Were these people patients? What was the logic of taking samples from these people and how is it relevant to the rest of the study?

Results:
Some typos e.g. A total of 84 vegetable(s) samples
Don't start sentence with 55 but spell it i.e. Fifty five
Second last sentence: Start with: Of the parasites detected, the most common.
Last sentence: Parasites were significantly less likely to be present on meat that was refrigerated during display than meat that was displayed at ambient temperature.

Conclusions:
Delete first sentence because you have tested only food samples at two markets without mentioning the potential distribution of the food around the Municipality.
Change the second sentence to: About half of the people surveyed (%) at the Municipal Hospital had one or more parasitic infections. Furthermore, meat (%) and vegetables (%) sold at the Municipal market were found to be contaminated with parasites.

Background
Change first sentence to: Intestinal parasites cause significant morbidity and mortality throughout the world, particularly in undeveloped countries and in persons with comorbidities.
A sentence about each parasite that you looked for would be interesting.
In humans, intestinal parasites are often due to poor personal hygiene (reference), environmental conditional like contamination of soil and water sources with human faeces (reference) as well as poor sewage disposal.
It has shown that raw sewage disposal such as use of night soil can be a major source of intestinal parasitic infection. Did reference 7 include money.

Delete last two sentences on page 4.

Study Population
Describe a correlational descriptive design it seems to be a convenience sample please describe the sampling plan clearly.
Describe how the sample size of each food was calculated it does not seem to be systematic please describe the sampling plan clearly.
The people in the hospitals may be more likely to have parasitic infections, this is especially the case if you sampled patients.
It does not seem like you used a stratified sampling techniques for the vegetables please describe the sampling plan clearly.
Briefly describe the laboratory methods used.

Overall risk of intestinal parasites
Delete this section.

Parasites in foodstuffs
Include results from the meat samples in this section.

Check the p values mentioned in the last sentence of the first paragraph.

First sentence of second paragraph, change to: Fifteen (68.2%) butcheries had the same person handling the meat and the cash (no cashier) while seven (31.8%) had a food handler and a cashier.
First and second paragraph on page 10. Re-analyse for butchers (n=22) with and without protective clothing as I suspect that there is likely to be little inter-variation between samples from the same butcher and do the same for the houseflies.

Discussion
Delete or re-write the first sentence this study did not investigate the risk of infection generally in Kisii Municipality.

More a need for education on food safety, Good Manufacturing Practice (GMP), Hazard Analysis Critical Control Pint (HACCP) more than health education.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions.

Level of interest: An article of importance in its field.

Quality of written English: Needs some language corrections before being.
published

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