Reviewer's report

Title: Intestinal infection with Campylobacter in a rural cohort in Moramanga, Madagascar

Version: 2 Date: 2 December 2013

Reviewer: Wilfrid van Pelt

Reviewer's report:

The authors have done an excellent job with this first round of revisions, so I am confident that they can address these remaining points.

Major compulsory revisions

• It is unclear if "twice weekly" means twice a week, i.e. two visits each week, or it means one visit every two weeks. If the latter, please use the wording "biweekly". If the former, I suggest to reword as "twice a week" to avoid confusion.

• In the abstract and introduction the authors state that they explored "the pathogenicity of Campylobacter". I am unsure what the authors really mean with that. Please be more specific about what this statement refers to.

• The authors performed this study in order to corroborate a previously made hypothesis about the role of immunity on Campylobacter infection. Evidence provided by this study supports this hypothesis but does not demonstrate it. In other words, the authors started with a hypothesis and ended with the same hypothesis; no "new" knowledge is actually added to previous evidence. Therefore the hypothesis still stands as a hypothesis. It would be appropriate to elaborate this in the manuscript; which is the added value of this manuscript?

• It seems appropriate to state clearly somewhere in the manuscript that the "surveillance activities" were performed for the purposes of this study only.

Minor essential revisions

Title

Please consider reword the title as "Campylobacter infection in a cohort of rural children in Moramanga, Madagascar"

Abstract

Background

"...developing countries, including Madagascar. Campylobacter is endemic in developing countries and repeated exposures over time seem to lead to ... We conducted this study to support evidence for this hypothesis by exploring the association between infection and age, the reoccurrence of infection ... in a cohort of rural children in Moramanga, Madagascar."

Methods
"We carried out a community-based longitudinal study of children under the age of 24 months in two rural villages. Children were visited twice a week and a stool specimen was collected in cases of diarrhoea. In parallel, stool specimens were collected bimonthly from all children enrolled, regardless of symptoms. Children were followed-up until the age of 36 months."

Results

In the last tense "confidence interval" can be acronymized as "CI"

Conclusions

"Care should be taken to children in their first year..."

I would personally delete the last sentence, from "Our observations..." to "...serotypes".

Introduction

Page 3: where is diarrhoea-related mortality decreasing? Worldwide?? Please confirm.

Page 3-4: "...is endemic in developing countries, where it is one of the most frequently isolated bacteria from both diarrhoeic and non-diarrhoeic children [5]."

Page 4, 2nd line: Current estimates of what? Please specify. Also remove the word "only"

Page 4, 3rd line: remove word "at"

Page 4, 4th line: "A case-control study for diarrhoea was conducted...."

Page 4, last 5 lines: ". . . following Campylobacter infection by conducting ... a cohort of children under the age of . . ."

Methods

Page 5, 2nd line: "...in the middle of the eastern region..."

Page 5, 3rd line: remove hyphen between HDSS and Moramanga.

Page 5, last line: "spp." not in italics. Check this also throughout the manuscript.

Page 6, 6th line: ". . . each of the children twice a week at their homes."

Page 6, last 6 lines: "...carried out a cross-sectional ... This cross-sectional study provided us with data on asymptomatic..."

Page 7: "Multiple Campylobacter infections were defined as..."

Page 8: in the "Data analysis" section, I do not understand what the authors mean with the last tense of the first paragraph, i.e. "The classification was chosen..."

Page 8: "...significant result was obtained by the Chi-squared test..."

Page 9: what do you mean with "at the outset of the multivariable analyses"? I am unsure what the authors mean with "robust confounding variables", please specify.

Discussion
Page 13: "...in Moramanga, as we observed an..."

Page 13-14: "...seemed to decrease the probability of acquiring infection in response to further exposures over time [14,15]."

Conclusions
Page 15: it is unclear what kind of evidence on the "high burden of Campylobacter infection" the authors have provided. Please specify.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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.

**Declaration of competing interests:**
I declare that I have no competing interests