Reviewer's report

Title: Paradoxical risk perception and behaviors related to Avian Flu outbreak and education campaign, Laos

Version: 1 Date: 25 October 2009

Reviewer: Thanawat Tiensin

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Major Compulsory Revisions:

Highly pathogenic avian influenza continues to spread globally and has become endemic in poultry flocks in a number of those affected countries. The study on risk perception and behavior associated with the introduction and spread of the virus in poultry and human is still not well understood. As a consequence, of the countries that have had with widespread H5N1 outbreaks, this study analyzing the public awareness and adoption of preventive measures related to the educational campaign is of particular importance to prevent the disease outbreak in the future.

The analysis was conducted at a household level. A 2-stage household-based cluster survey was conducted. The authors mentioned that villages were randomly selected and then households were randomly chosen. It did not describe what the cluster survey is.

In this manuscript, 5 provinces were included in the study. Providing proportion of households selected in each province would help to understand the structure of the population.

As mentioned, the multivariate logistic regression was used to analyze factors. Which method was used for univariable analysis before including in multivariate logistic regression?

The authors used multivariate logistic regression, but the result was not shown. How did you determine the model fit? Specify how exactly you sought to produce more robust results. The goodness-of-fit for logistic regress model was assessed by which method?

Specify clearly what was used to determine co-linearity in this analysis.

Figure 1 is not clear (low quality). Dot lines are very confusing. A classification (8 classes) of poultry population could not be differentiated visually between different classes.

Table 1 is too big and very difficult to read and understand for the reader. Only the 2007 data may be enough to present main characteristics of study population.
Number of household included in the study is 1100 or 1098?

In the result, it said “the level of awareness was similar to that in 2006”. Expand on this where in the Table shows us this statement.

In table 1, there were missing data in several questions. How did you deal with the missing data while analyzing?

In the table 1 - Poultry raising habits “Regular”, what does “Regular” mean?

A table to summarize all factors and their description in the study is needed.

The authors did not discuss on limitation and bias of the study. Actually this type of study may lead to bias from interpretation and questioning technique of interviewers. Is there potential for inconsistency of data collection from different interviewers? Some comment is required.

How did you come up in the discussion that HPAI awareness remained above 90% between 2006 and 2007?

A questionnaire (English version) as a supplement may be required for better understanding of the study.

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

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

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests