Reviewer's report

Title: Stepwise approach for the control and eventual elimination of Taenia solium as a public health problem

Version: 0 Date: 18 Jun 2018

Reviewer: Safari Kinung’hi

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Stepwise approach necessary to address Taenia solium as a public health problem. Uffe Christian Braae et al

Taenia solium cysticercosis is a parasitic infection caused by larval cysts of the tapeworm Taenia solium, and affects both pigs and humans. The disease is among the 17 neglected tropical diseases earmarked for global elimination. The current manuscript by Uffe Christian Braae and his/her colleagues titled “Stepwise approach necessary to address Taenia solium as a public health problem” therefore comes at the right time when the international community is intensifying efforts to control and eventually eliminate neglected tropical diseases in line with the World Health Assembly resolution number WHA66.12 of May 2013. The proposed strategy is a justifiable attempt to provide a solution to this important neglected tropical disease of pigs and humans. There are however some considerations which the authors need to consider to improve the manuscript as follows:

1. General comments:

Though the proposed strategy focuses on the one health approach based on local/country specific disease control goals and targets, there is the need to align these within the framework of the global roadmap for the control and eventual elimination of NTDs which is an overarching document globally. There is a need to briefly describe the control and eventual elimination processes for Taenia solium cysticercosis as stipulated in this roadmap before going to state the weaknesses/limitations and possible solutions as stated in the proposed strategy.

2. Specific comments:

Title: The title should be rephrased to "Stepwise approach for the control and eventual elimination of Taenia solium cysticercosis as a public health problem"

Abstract: Line 54 and 55, sentence reading "... and standardised monitoring of ...". Add "and" in place of "of" between the words "monitoring" and "evaluation".

Background: Line 77 through 85. These statements need to be rephrased and put in line with the current WHO roadmap for global elimination of NTDs. Specifically, I am not sure whether the
concept of "Locally acceptable control goals and standardized intervention toolkits and diagnostics" is feasible practically and fits properly within this roadmap. Does all endemic countries have the capacity to set their control/elimination goals? How will monitoring and evaluation of the impact of interventions be carried out in endemic countries and achievements be compared among different countries at the regional/global level? My thinking is that though implementation of control interventions is carried out at the local/country level, control goals should be set at least at the regional level. Disease control and elimination is a collaborative activity. It requires coordination of efforts and standardization of methods and approaches at the regional/global levels. This means that efforts and approaches which will eventually succeed are those which are properly coordinated at the regional/global level.

Discussion: Line 119 to 121, sentence starting with "... The incidence of taeniosis can in theory ....". Rephrase to "The incidence of taeniosis can in theory, be used as a proxy indicator for the risk of NCC".

Standardised monitoring of control programmes: Lines 114 through 131. For the purpose of control programmes, cut off points in terms of prevalence/incidence of cysticercosis in both pigs and humans can be developed and used to define elimination goals. Control interventions need to continue even in the absence of models. There is a need to develop cut of points for high, moderate and low transmission areas and define points at which the disease can be said to be of no public health importance. Further, there is a need to briefly describe the factors which can affect transmission of taeniosis from pigs to humans. Before porcine cysticercosis can be used as an indicator of the risk of the disease in humans, these factors will need to be considered.

Conclusion: Line 215 sentence starting with "Measuring and evaluating the success of ...", Rephrase to "Measuring and evaluating the success of disease control programmes remains a major issue".

Minor comments:

There are minor grammatical and spelling errors in the document. The authors are kindly advised to proof read their documents and correct these errors.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
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No

Are the conclusions drawn adequately supported by the data shown?
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Yes

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