

# A qualitative assessment of the context and enabling environment for the control of *Taenia solium* infections in endemic settings

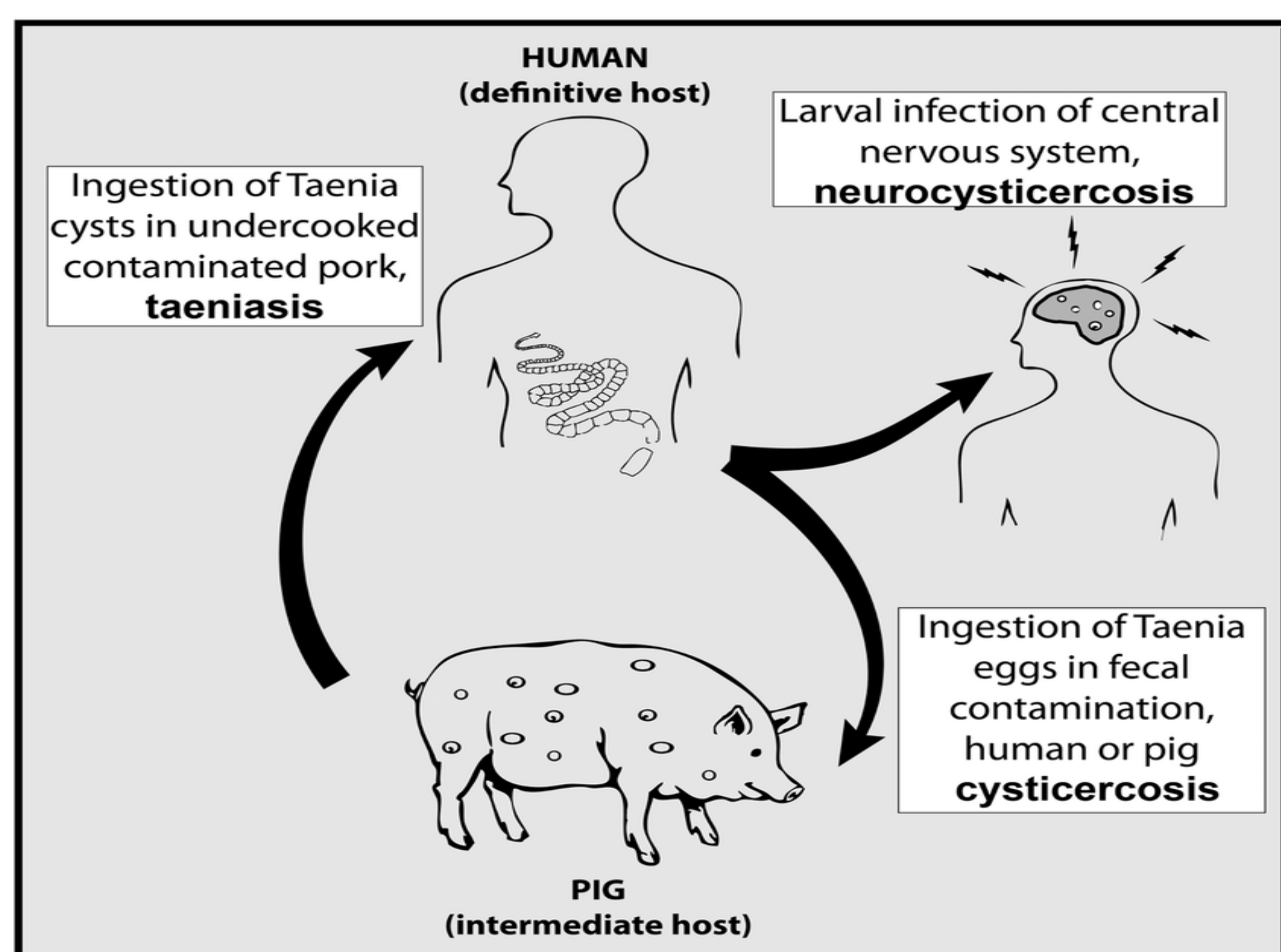
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## Introduction

*Taenia solium*, is a zoonotic parasite causing three diseases; taeniasis (in humans), neurocysticercosis (NCC, in humans) and porcine cysticercosis (PCC, in pigs). We hypothesized that the success or failure of the interventions may be attributed to the interaction between the intervention and factors present in the context.

***T. solium* life cycle (Source O'Neal et al., 2014).**



## Objective

To identify the contextual factors and using examples to demonstrate how they may have interacted with interventions to influence their successful implementation and evaluation.

## Methodology

### 1. A systematic literature review (SLR) - Field-based

interventions between January 1950 and May 2019, PRISMA guidelines

### 2. Key informant interviews (KII) - KII with 11

researchers/implementers of the studies included in the SLR via Skype

- An analytical framework developed to guide analysis based on Craig et al., 2018, Bardosh 2018 and Braae et al, 2019

### Highlights from SLR

- 41 studies identified- Africa 15, Latin America 18, and Asia 8 studies. 10 efficacy, 28 effectiveness and 3 scale up studies

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## Results

Contextual factor	Specific examples from the studies
<b>Epidemiological</b>	Baseline prevalence studies, baseline anthropological studies, loss to follow up and how to overcome, diagnostic methods
<b>Social, economic and cultural</b>	Beliefs, attitudes and practices may maintain <i>T. solium</i> transmission within a community and may be hard to change. Baseline knowledge can affect delivery and evaluation; motivation to rear pigs and importance of pigs in the community, language, cultural norms and taboos
<b>Geographical and environmental</b>	Natural and built environment e.g., lack of roads, lack of sample handling and storage facilities; seasonality of rainfall and cropping season.
<b>Service and organizational</b>	Local capacities of staff and institutions; stakeholder involvement and sensitization; incentives to ministry staff involvement in implementation.
<b>Policy and strategies on <i>T. solium</i> control</b>	country laws on licensing of the drugs and ethical approvals; control of <i>T. solium</i> should be embedded within target country disease control; integration of <i>T. solium</i> control with existing disease control programs.
<b>Historical</b>	Past involvement of target community and their experiences about other projects.
<b>Political</b>	Power dynamics among stakeholders; influence and power of local administrators.
<b>Financial</b>	Sources and mechanisms for funding for the intervention; costs versus the benefits.

## Conclusion

- Success or failure of the interventions may be attributed to the interaction between the intervention and factors present in the context
- Contextual factors should be consistently evaluated at the planning, implementation and evaluation stages and documented.
- Article available at

<https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0009470>



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