



Serological prevalence and factors associated with human trichinellosis and cysticercosis in Hoa Binh Province, Northwest Vietnam

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BACKGROUND

- Trichinella spiralis* and *Taenia solium* are two pork-borne parasites that contribute to the foodborne disease burden in Vietnam (Figure 1).
- Northwest mountainous regions of Vietnam prone to outbreaks, in part due to free range pig rearing.
- Poverty and inadequate sanitation are risk factors for cysticercosis.

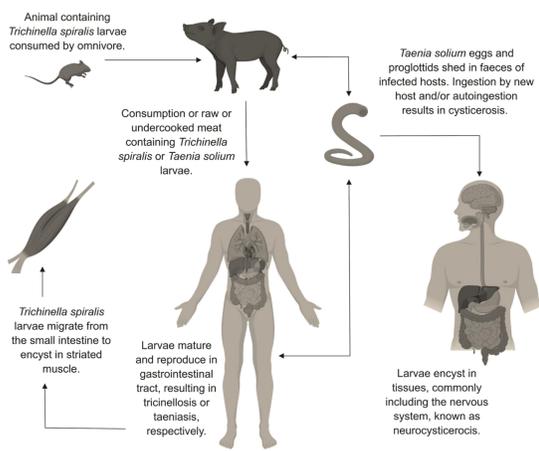


Figure 1. Transmission of trichinellosis and cysticercosis to humans

METHOD

- 300 participants from Da Bac District, Hoa Binh Province completed a questionnaire and submitted a blood sample as part of the study.
- An enzyme-linked immunosorbent assay (ELISA) was utilised to identify cases of trichinellosis and cysticercosis (Demeditec® *Trichinella spiralis* IgG ELISA DETRIG0480, Germany and Apdia® Cysticercosis Antigen ELISA Ref 650501, Belgium).



RESULTS

Characteristics of patients

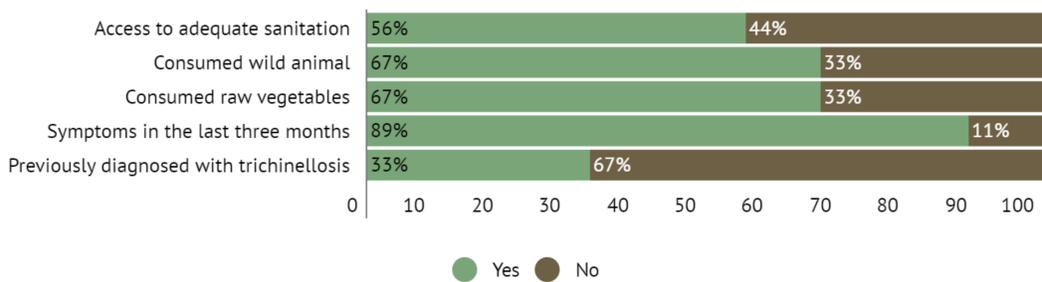
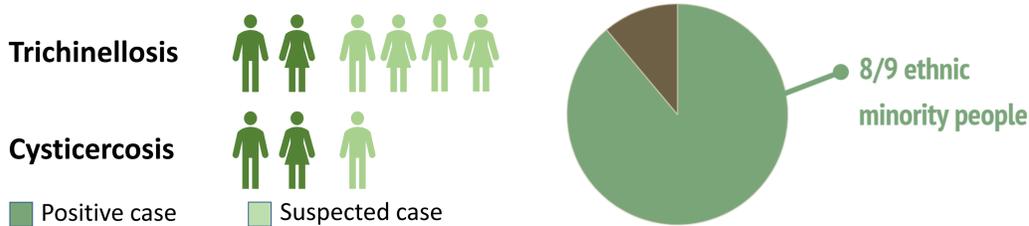


Figure 2. Risk factors associated with positive and suspected cases of trichinellosis and cysticercosis

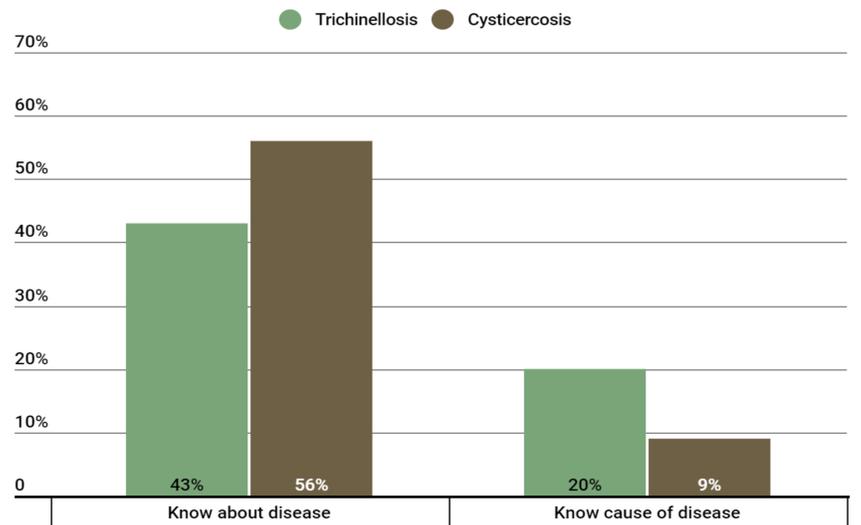


Figure 3. Knowledge of participants about trichinellosis and cysticercosis

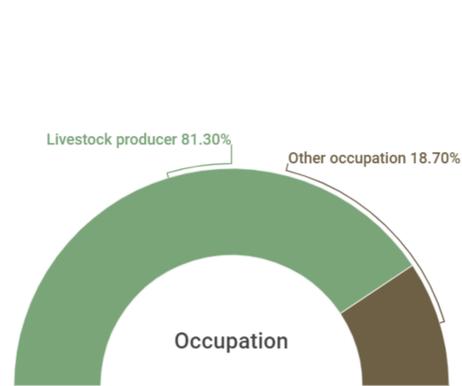


Figure 4. Primary occupation of participants

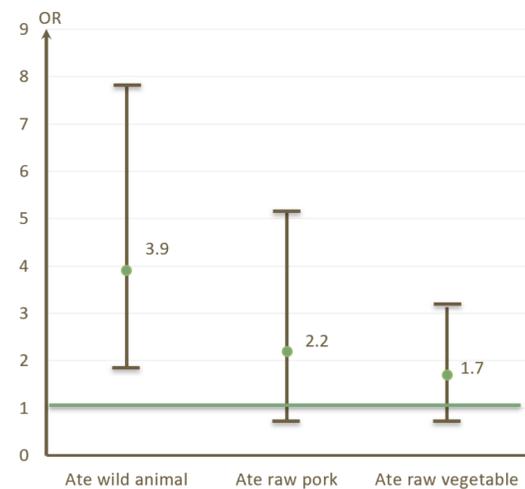


Figure 5. Eating behaviour among participants for previous 3 months, (males compared with females)

CONCLUSION

- Further research and services are required to identify and treat areas where infections are concentrated, acting as reservoirs.
- Qualitative research to explore drivers that underlie reported risk factors and observed trends would be beneficial.
- The design and implementation of appropriate and sustainable public health interventions would benefit from a framework to address gendered risk.

ACKNOWLEDGEMENT



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