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*Publication date:*
2015

*Document version*
Early version, also known as pre-print

*Citation for published version (APA):*
Kitchen waste as pig feed sustains transmission of *Taenia solium* cysticercosis in Mbeya, Tanzania

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Background

- Recent data have shown that confinement of pigs can be insufficient in preventing transmission of porcine cysticercosis, indicating that pigs might become infected while being confined [1].

Hypothesis

- Pigs are infected with porcine cysticercosis through environmental contamination while being confined.

Aim

- To identify risk factors associated with porcine cysticercosis using a case-control study design.

Methods

- Case-control study design consisting of questionnaire interviews and observational surveys, utilising known information on persistent or multiple infections of porcine cysticercosis in an endemic area of Tanzania [1].

- Households were allocated to either the case or control group based on at least two visits during a 14-month period.

- Cases had one or more cysticercosis positive pigs on at least two occasions whereas controls had none.

- Risk factors were identified by logistic regression analyses.

Results

- From 20 villages a total of 93 households participated - 43 cases and 50 controls.

- Potato peels were said to be given to pigs either raw or boiled by 46% of the farmers.

- Porcine cysticercosis could be associated with absence or a completely open latrine (p=0.035, OR 5.98, CI: 1.33-43.02) compared to an enclosed latrine and feeding potato peels to pigs (P=0.007, OR 3.45, CI: 1.43-8.79).

Take home messages

- Whether potato peels are contaminated with *Taenia* eggs before they reach the household or whether the contamination is from water or dirty hands during peeling, remains to be confirmed.

- This study suggests that detailed assessment of a number of areas of pig management is essential for designing effective control programmes.

Acknowledgements

The Bill and Melinda Gates Foundation and the SLIPP-project (Securing rural Livelihoods through Improved smallholder Pig Production in Mozambique and Tanzania) funded by the Danish International Development Agency (Danida), file no. 09-007LIFE.

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