References


Table 1: Risk factors associated with positive and suspected cases of trichinellosis and cysticercosis

<table>
<thead>
<tr>
<th>Status (Positive/Suspected)</th>
<th>Trichinellosis</th>
<th>Cysticercosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Age</td>
<td>36</td>
<td>39</td>
</tr>
<tr>
<td>Ethnic minority</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Access to adequate sanitation</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Livestock producer</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Consumed wild animal</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Consumed raw vegetables</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Symptoms in the last three months</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Results

Out of 270 pig samples analysed 79 (29%) were tested positive for Trichinella. ELISA testing for cysticercosis in pigs wasn’t performed due to high cross-reactivity with other Taenia spp. The prevalence for Trichinella were higher in older pigs (> 5 year). Results for Trichinella and cysticercosis in humans indicate a prevalence of 17% (40/238) and 3.4% (8/238) respectively. Positive serological responses for Trichinella were higher in males than females. Results also showed that the most villagers are aware of health risks when consuming raw or undercooked pork but they continue to do so as they like certain dishes containing raw or undercooked pork e.g. fermented sausages. This finding shows that past public health campaigns may have increased awareness of villagers on PPBD but consumption behaviour remains often unchanged. Therefore socio-cultural aspects for behaviour and its change should be further explored. Policy level (national and provincial) and community feedback was provided through a previously established one-health multi-institutional platform. The platform consists of 6 ministries namely: Health, Agriculture, Tourism, Communication, Education and Defence.

Discussion and Conclusion

While results of this study for trichinellosis and cysticercosis in humans were considerably lower than those reported for the neighbouring province of Savannakhet (Holt et al. 2016) both parasitic zoonoses still pose a considerable risk to villagers in the study area. As we also observed risky consumption habits of villagers it is crucial that public health campaign also cover socio-cultural aspects of communities to be more effective in the future. Follow up activities are planned for 2019 will focus on more in-depth diagnoses procedures for cysticercosis in pigs and may include dissection of carcasses in an attempt to get more reliable information on the presence of cysts in pigs. Furthermore the multi-institutional platform will be further engaged and linked to a recently established one health platform to facilitate dissemination of results to relevant stakeholders and informative materials to villagers.

Acknowledgement

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Reference