Member experience on prevention and control for Schistosomiasis [PHILIPPINES]

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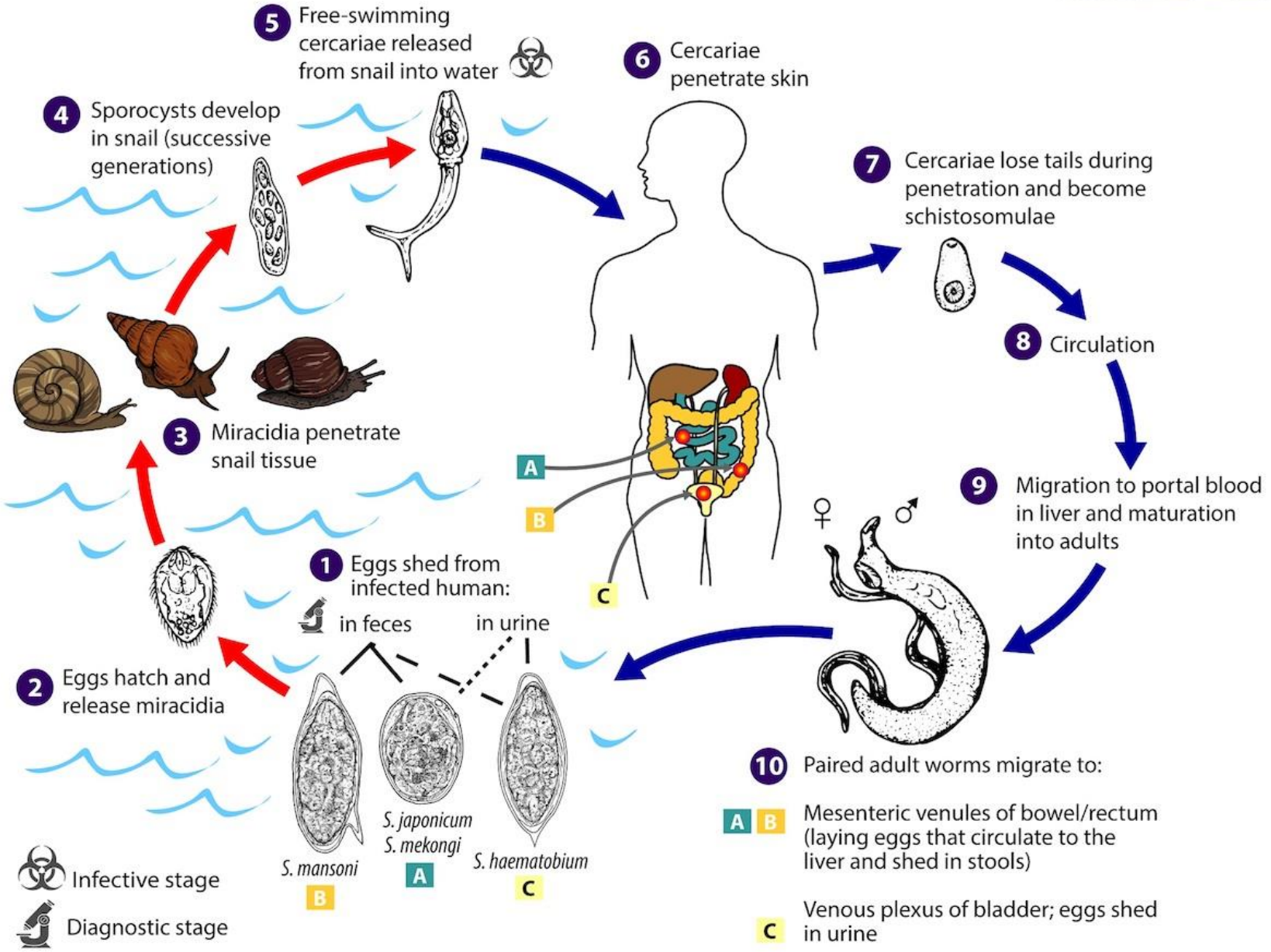
Vector Borne Disease situations

- Schistosomiasis
  - Neglected tropical disease caused by the blood fluke of the Genus Schistosoma, which currently infects over 250 million people worldwide.
  - The species endemic in the Philippines, Schistosoma japonicum, affects 12 million people living in 28 endemic provinces including Northern Samar which has the highest prevalence rate in humans based on the National Baseline Prevalence Survey done in 2013-2015 by the Department of Agriculture.

DPDx

Schistosoma spp.

CDC



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PILOT STUDY

Prevalence Survey of Schistosoma Japonicum among water buffaloes in Human-schistosomiasis-endemic villages in Northern Samar

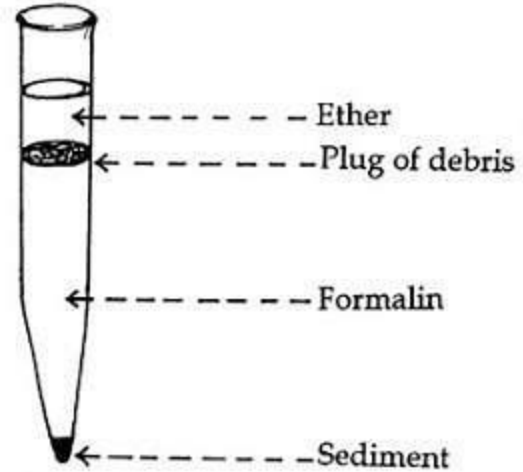
Objectives:

1. Prevalence of schistosomiasis among water buffaloes in human-schistosomiasis-endemic villages in Northern Samar;

2. Level of awareness in terms of knowledge, attitudes and practices (KAP) on animal Schistosomiasis among the carabao owners.

Detection capacity for Schistosomiasis

- Formalin-Ethyl Acetate Sedimentation - Digestion Method (FEAS-D)
  - Trained several personnel from the Animal Disease Diagnostic and Reference Laboratory (ADDRL) and Regional Animal Disease Diagnostic Laboratory 8 (RADDL)



Formal ether sedimentation technique




Response to Schistosomiasis

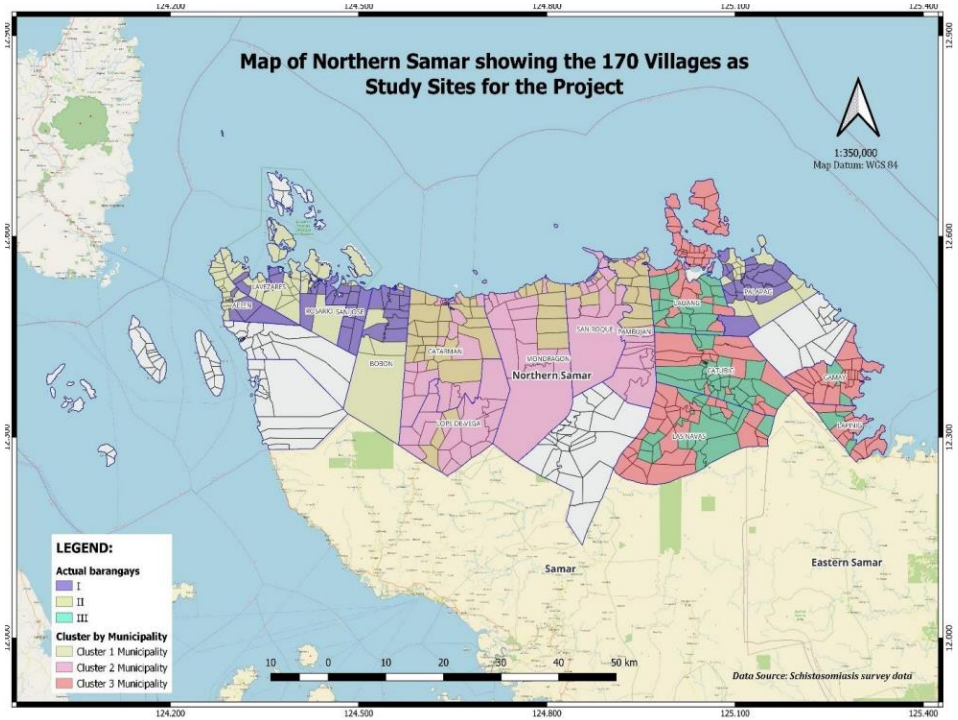
- *Surveillance*
  - Sample (fecal) collection from carabaos (water buffaloes)

- *Preventive measures to avoid introduction*
  - Praziquantel (defluking and deworming) is distributed to household owners of carabaos

- *Vaccination (if applicable)*
  - No vaccine for Schistosomiasis

PILOT STUDY

- Prevalence of Schistosomiasis
  - The study found out that the overall prevalence rate for Schistosomiasis among carabaos in the 170 villages of 16 municipalities in the province of Northern Samar was 0.84%



Result of the KAP survey

- 2,969 respondents from 170 human-Schistosomiasis-endemic villages in the province of Northern Samar

- Knowledge on Schistosomiasis
  - Awareness on the signs and symptoms in humas, situations and conditions that contribute to Schistosomiasis infection among the respondents were generally poor

- Knowledge on Snails
  - 50.45% of the respondents are aware that snails play a major role in Schistosomiasis infection.
  - 95.55% of the respondents associated snails with Schistosomiasis infection.

Result of the KAP survey

- Knowledge on Schistosomiasis in carabaos
  - 45.54% were aware that carabaos can get infected with Schistosomiasis
  - 41.07% does not know the sings of Schistosomiasis among carabaos

- Attitude towards carabao Schistosomiasis
  - 38.04% avail of veterinary services in the locality
  - 38.87% agree of submitting their carabaos for disease diagnosis
  - 40.03% agree to submit their carabaos for treatment

Result of the KAP survey

- *Practice towards carabao Schistosomiasis*
  - 35.59% dispose their household wastes by burning
  - 71.47% of the respondents stated that their carabaos have frequent contact with bodies of water
    - *These poor practices on the disposal of household wastes and exposure to bodies of water that possibly infected with S. japonicum can enhance in contracting and sustaining Schistosomiasis for both humans and animals*
  - 73.19% consult for their veterinary health service/assistance provided to carabao raisers and follow the recommended instructions from the veterinarian or agricultural technician
  - However, 60.32% do not submit their animals for defluking and 48.33% do not deworm their carabao

Challenge and possible solutions

Challenges

- ✓Availability of fast and practical diagnostic tools/kits and its validation in animals
- ✓Lack of baseline data for animal schistosomiasis infection (prevalence and economic burden)
- ✓Commercial availability of praziquantel drug for large animals for treatment
- ✓Resources : budget and manpower
- ✓Mechanization or replacement of carabaos with machines may be hard to implement
- ✓Case finding and reporting

Possible Solutions

- ✓Use of fast, practical, and accurate diagnostic tool/s.

- ✓Multisectoral collaboration
  - ✓ Inclusion and strengthening of the Animal Schistosomiasis as a program using One Health platforms
  - ✓ Engaging private institutions – Academe, Developmental partners, Philippine College of Veterinary Public Health

Collaboration with other sectors under One Health approach

- *Philippine Interagency Committee on Zoonoses (PhilCZ)*
  - Composed of Department of Health, Department of Agriculture and Department of Environment and Natural Resources
  - Objectives of PhilCZ:

    - Develop a **national strategy** on prevention, control and elimination of zoonoses and
    - Establish a **functional and sustainable mechanism** to strengthen the animal-human interface for the effective prevention, control and elimination of zoonotic diseases.

Challenge and possible solutions to strengthen the collaboration

Challenges	How to address these challenges
• Policy Support	✓Increase One Health Advocacy and message development for policy makers and the public
• Access to funding	✓Provision of funding
• Training on One Health Approach	✓Enhanced educational & training programs on One Health

Thank you

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Expectations for the VBDs workshop (Not Included in the Presentation)

- Please share your expectations for the VBDs workshop
- What specific information about VBDs you expect to obtain from experts
- What disease experience you expect to gain from member countries/territories