



## QUALITATIVE STUDY OF OPISTHORCHIASIS IN A RURAL COMMUNITY, CENTRAL THAILAND

**Saranapoom Klomjit\* ,Veerayut Anunsawat\* ,Teerapat  
Tutaworn\* ,Pimjit Rungtrakulchai\***

**Sirada Suttiwattana\***

**Saovanee Leelayoova\*\* ,Paanjit Taamasri\*\***

**Picha Suwanhithathorn\*\* ,Mathirut Mungthin\*\***

**\*Fifth year Medical Cadet, Phramongkutklao College of Medicine,**

**\*\*Department of Parasitology, Phramongkutklao College of Medicine**



# Introduction

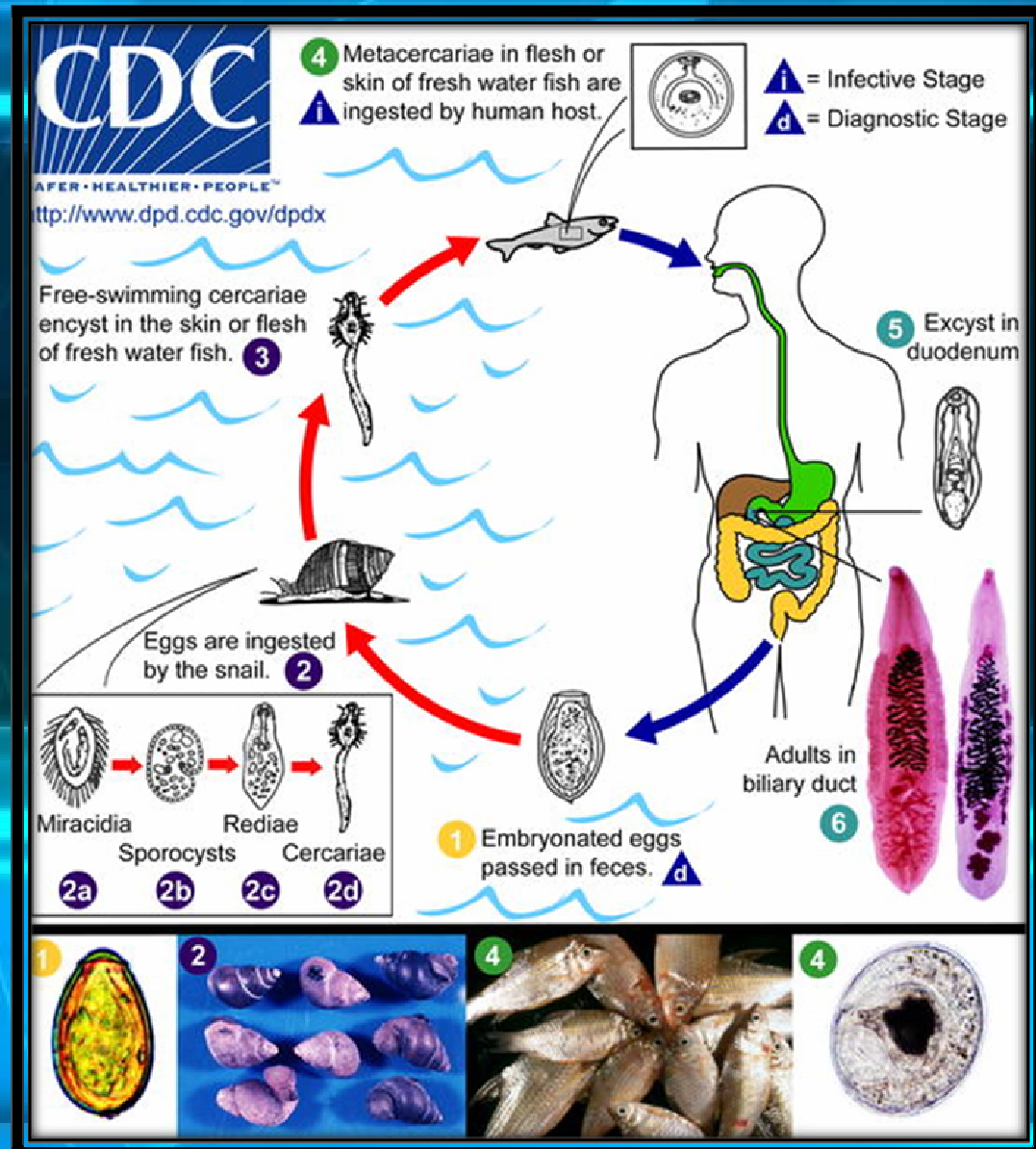
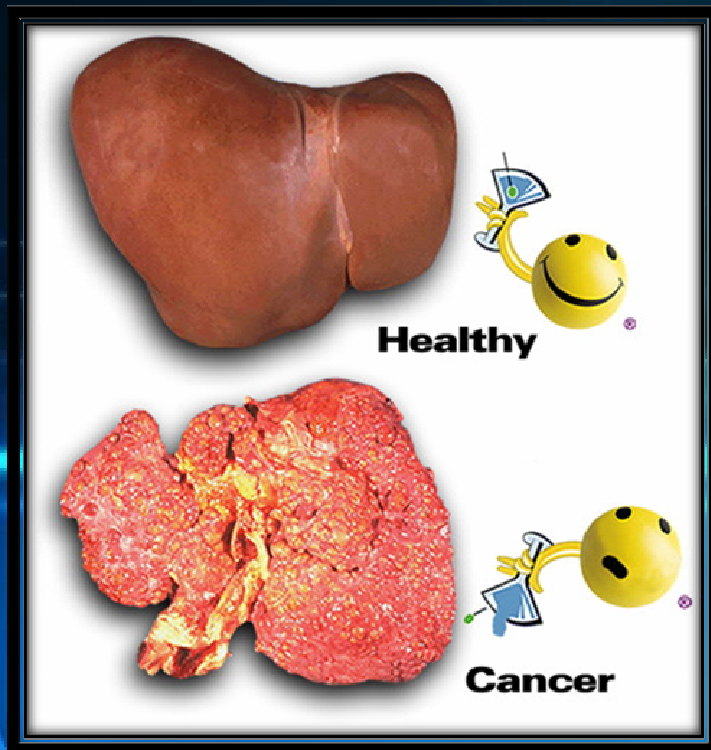


*Opisthorchis viverrini*

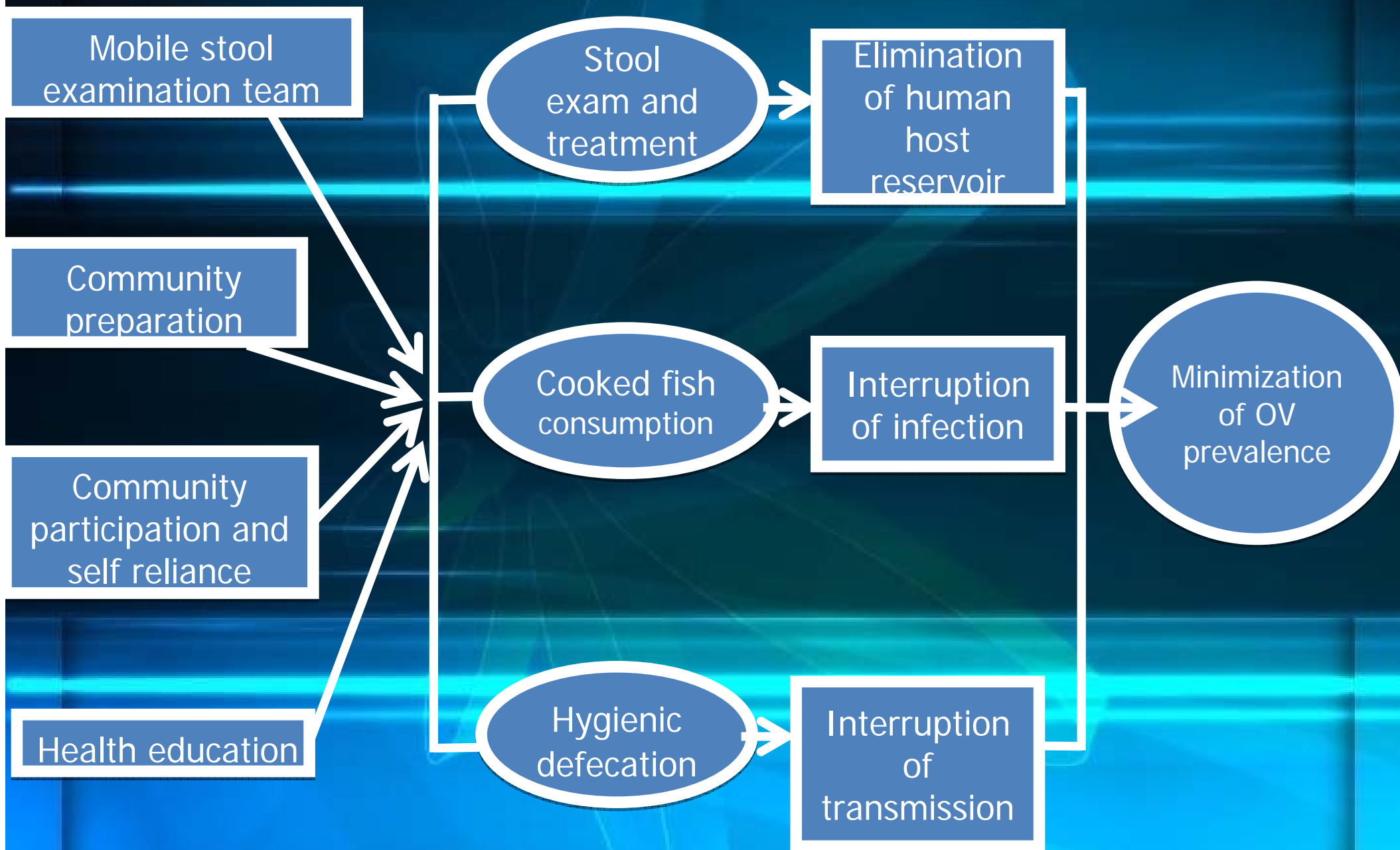
- Thailand is an endemic area for opisthorchiasis, with estimated six million infected people.
- Prevalence 9.6% (in 2002)



# Opisthorchiasis





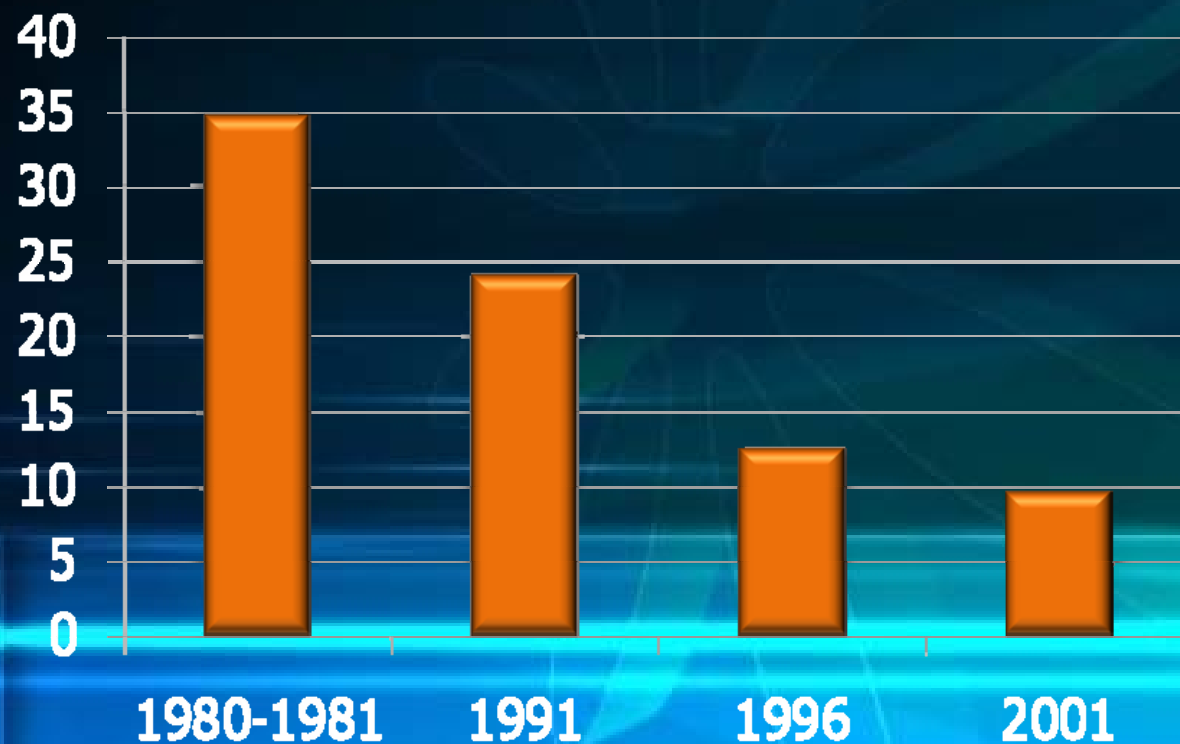






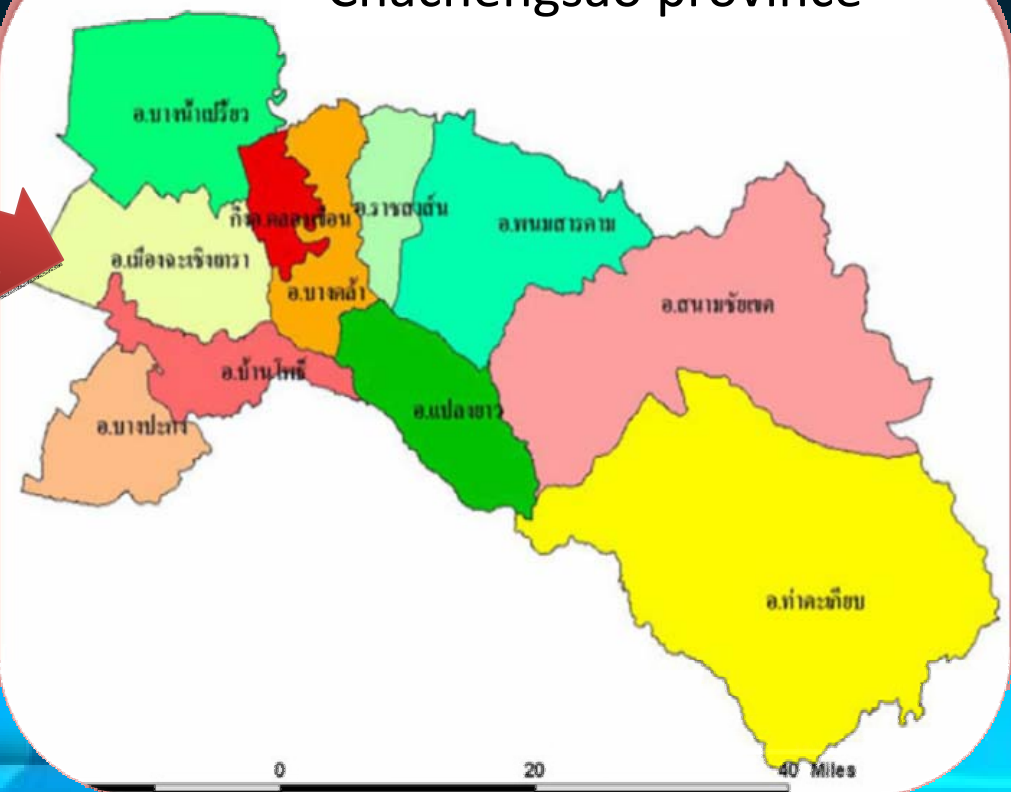
# Introduction

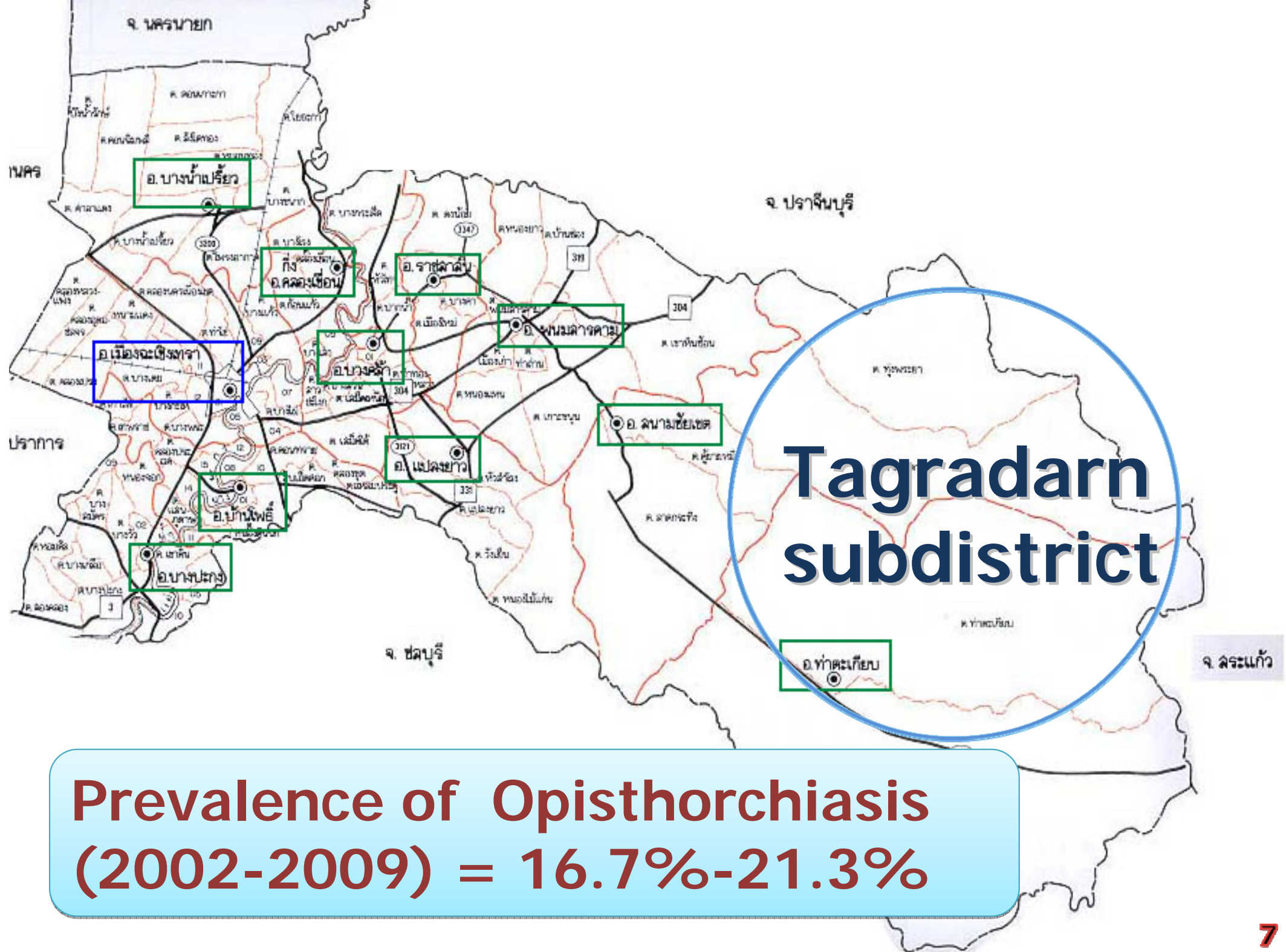
**Prevalence of opisthorchiasis in Thailand**



Prevalence of opisthorchiasis in Thailand











# CHARACTERISTICS OF POPULATION

- Isolated large community
- Northeastern (Isarn) culture
- Agricultural community





# Introduction



- In 2004, the incidence rate was 21.6/100 person-years in **Baan Nayao**
- Significant risk factor was Koi pla consumption

Rangsin et al., 2009



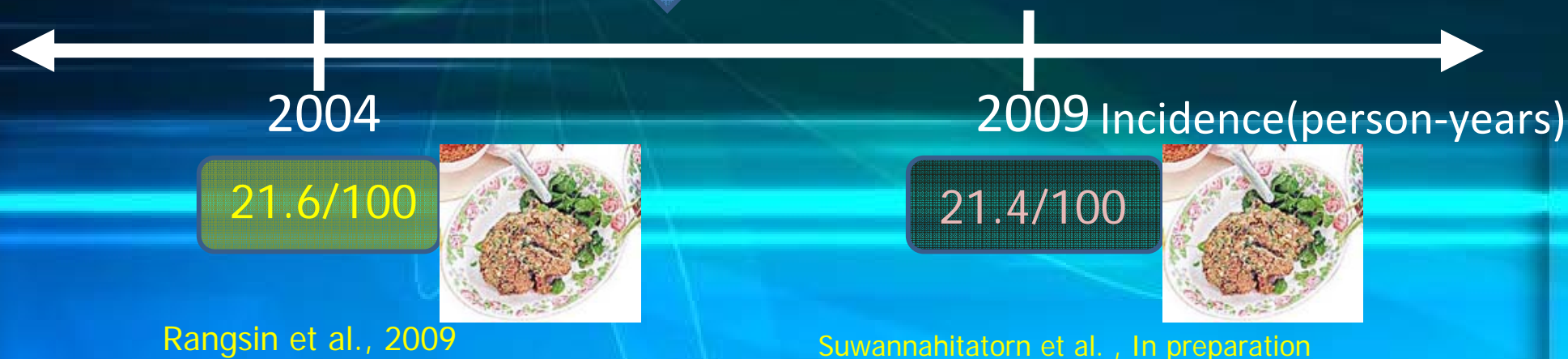


## Case diagnosis and treatment

## Health education and promotion

Cooked fish  
consumption

Hygienic  
defecation







Why did the incidence of  
opisthorchiasis not decline?



# Qualitative study

- To determine why opisthorchiasis still persists
- Grounded theory
- Focus group discussion



# Focused group discussion

purposive sampling





infected female



Uninfected female



Uninfected male



Infected male







# Focused group discussion

Data collection

Data saturation



Content analysis





# Raw fish consumption



Pla ra > Koi pla



Males ate Koi pla more than females

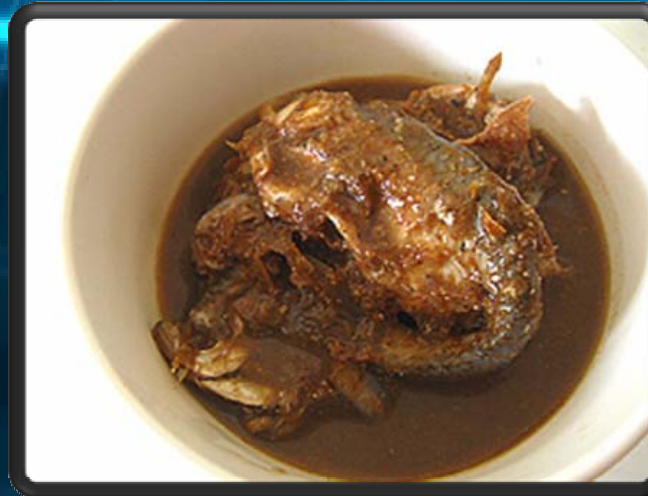


Harvest season





# Raw fish consumption : Knowledge



Source of infection  
Route of transmission

Pla ra vs Koi pla





# Raw fish consumption : Attitude



Delicious

Isarn like to eat raw food

*"I think environment force us to eat this way. I eat whatever our parents do. It's inevitable."*



Convenient

Negative result







# Raw fish consumption : Believe







## Raw fish consumption : Social & Cultural



Koi pla is the traditional food

*"It's our living style that we eat simple dish in the rice field. Doctors wake up and cook something to eat. Farmers wake up and go to the field and find something to eat."*





# Cholangiocarcinoma



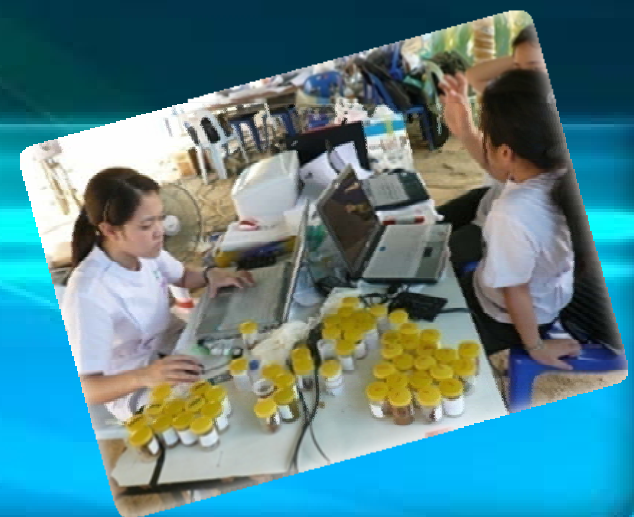




# Diagnosis

## Diagnosis

- Local health center could not make diagnosis
- They weren't concerned since no symptoms occur



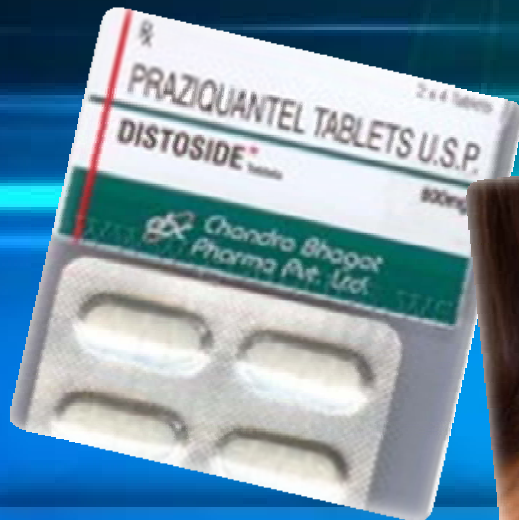




# Treatment

## Treatment

- Local health center and drug stores: no Praziquantel
- Treatment was effective
- Side effects were drowsiness, stomachache, fatigue





# Prevention and control

## Health promotion

- Regular
- In school
- Show them the outcomes





# Prevention and control

## Defecation

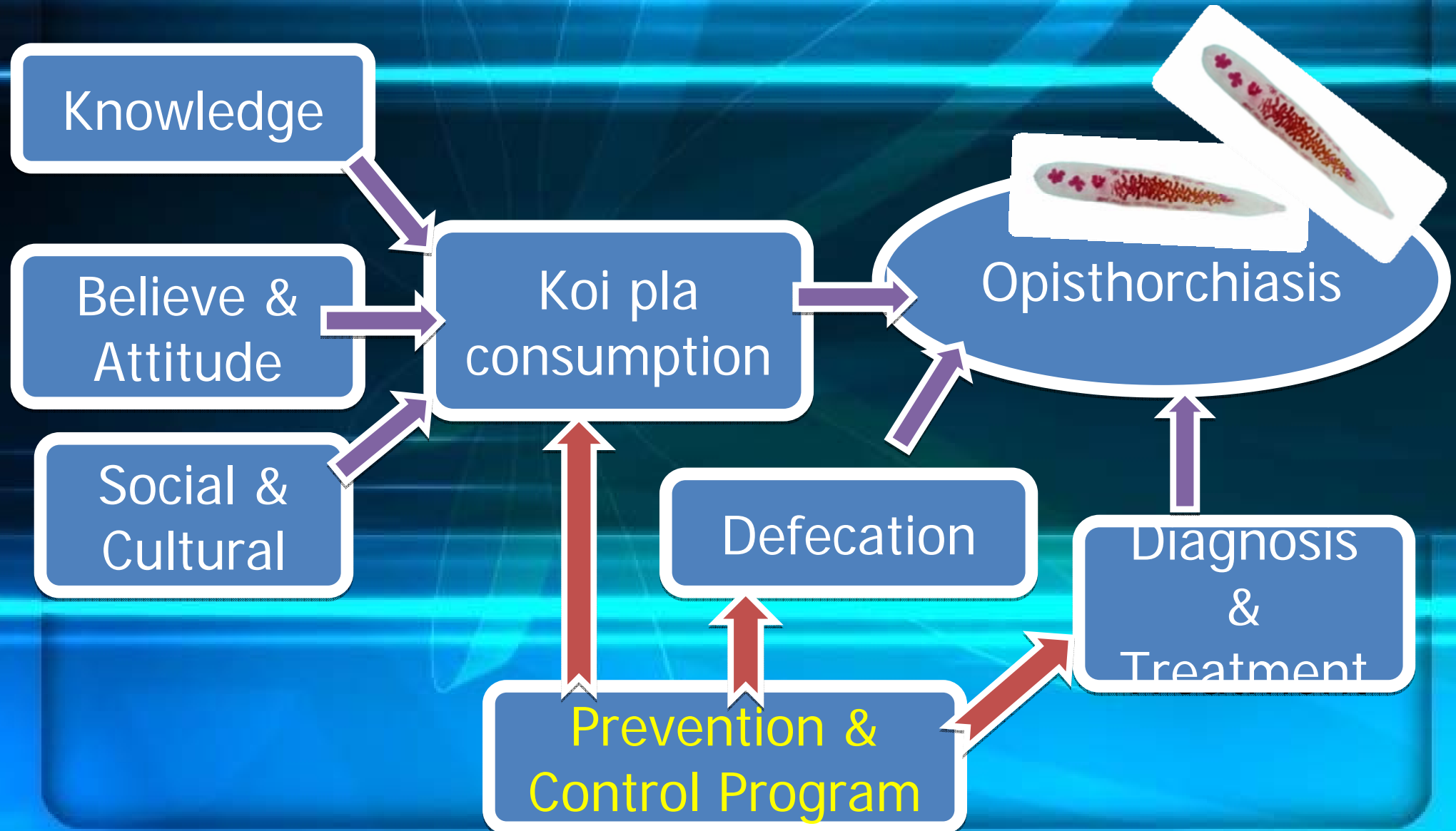
- No toilet in the rice field
- Immigrant workers







# Discussion and suggestion





# Discussion and suggestion

## ➤ Interventions

### ➤ Health education and Promotion

- Regularity
- Community participation and empowerment
- Targeting children

### ➤ Messages

- Easily understood
- Clear and precise word: koi pla
- Terrifying outcomes





# Discussion and suggestion

- Adequate diagnosis and treatment
  - Adult male and elderly
- 100% hygienic defecation



# Conclusion

Opisthorchiasis was still persistent due to inadequate knowledge, misbelieves, social and culture, including unavailable diagnosis and treatment













# ACKNOWLEDGEMENT

- Participants at Baan Nayao
- Staff of the Department of Parasitology, Phramongkutklao College of Medicine
- Staff of the Department of Military and Community Medicine, Phramongkutklao College of Medicine