

O060

Oral Session

News in travel, tropical, and parasitic infections

THE CARCINOGENIC HUMAN LIVER FLUKE, OPISTHORCHIS VIVERRINI: EXCEPTIONALLY FISH-BORNE DISEASE INDICATES THE PATIENT INFECTION IN RURAL COMMUNITY OF THAILAND

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Objectives This study aimed to analyse the correlation between the *Opisthorchis viverrini* infection in human and cyprinoid fish from the rural community of Thailand.

Methods A community-based cross-sectional survey was performed among 1,268 people and 640 cyprinoid fishes were collected from 32 districts of Nakhon Ratchasima province, Thailand during two years period from February 2010 to February 2012. Stool samples were examined for the *O. viverrini* infection using a modified Kato's Thick Smear technique. Cyprinoid fishes were investigated for the *O. viverrini* metacercariae using a Pepsin-HCl digestion. Pearson correlation test was used to calculate between the *O. viverrini* infection in human and cyprinoid fish.

Results A total of 1,268 stool samples and 640 cyprinoid fishes were included. Of 2.37% (30/1,268) stool samples were found positive for *O. viverrini* eggs, where the stool samples were collected from 14 districts, while 12.34% (79/640) cyprinoid fishes were positive for *O. viverrini* metacercariae where the cyprinoid fishes were collected from 25 districts of Nakhon Ratchasima province. The number of metacercariae *O. viverrini* infecting cyprinoid fish and *O. viverrini* infecting human were positively correlated with 0.31, (P -value < 0.05).

Conclusion This study suggests that fish-borne disease indicates the *O. viverrini* infection in human who inhabit in the rural community where locate the epidemic areas, therefore, large scale survey and health education are urgently required.