

Thesis Title Study on Epidemiology and Risk Factors of Opisthorchiasis, Wattana Nakorn district, Prachinburi province.

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Date of Graduation 11 February B.E. 2535 (1992)

#### ABSTRACT

The study is concerned with the epidemiology and some risk factors of opisthorchiasis in Ban Nong Yang, Takwien sub-district, Wattana Nakorn district, Prachinburi province, Central region, Thailand from January to September, 1991.

Among 416 individuals sampled from 111 households, opisthorchiasis was the highest parasitic infection (71.2%) by the modified formalin-detergent technique. Quantitative egg counts revealed that the intensity of infection fell mostly within the low level (<1,000 egg count per gram of feces) (72.0%). Most fecal

egg counts revealed 100 egg count per gram of feces (EPG).

There was a probability of age associated with opisthorchiasis ( $P < 0.0001$ ), which was highest in the 30-39-year age group (86.4%) but not associated with the intensity of infection.

The variables, sex, education levels, occupation were not associated with the prevalence and intensity of *Opisthorchis viverrini* infection. No significant difference of the migration from the northeast region with opisthorchiasis.

The knowledge and practice about opisthorchiasis were associated with opisthorchiasis ( $P < 0.0001$ ) but were not associated with the intensity of *Opisthorchis viverrini* infection. The attitude were not associated with the prevalence and intensity of opisthorchiasis.

Fecal examination of 94 dogs and 7 cats by simple smear technique was found that it was 1.1 and zero percent positive. However 3.1% of 998 cyprinoid fish was found for metacercaria while the snail (*Bithynia* sp.) was found no cercaria. Most villagers (32.95%) ate Kuilam fish (*Larbiobarbus spitopleura*) in which caught from Klong-Yudhasat (34.3%).

The factors influenced the difference of the opisthorchiasis were eating habit of raw fish ( $P < 0.0001$ ), insufficiently cooked fish ( $P < 0.0001$ ) and Somtum with plarah. (thai local food of northeast people consisted of papaya with lemon, fish sauce, galic and raw fermented fish.) ( $P < 0.0001$ )

The indirect factors that effect on the prevalence of opisthorchiasis were giving some human raw fish food to the dog and the cat ( $P < 0.0060$ ) and irregular latrine using ( $P = 0.0160$ ). These were supportive factors that enhanced widespread transmission of opisthorchiasis.