



Proportions of Khon Kaen University Students which Living in Dormitory who have Sufficient Knowledge about Food and Food Preparation that Increase Risk of *Opisthorchisviverrini* Infection and Cholangiocarcinoma

Nattakarn Tantawarak¹, Chaiwat Ruedech¹, Sutinee Utranusorn¹, Chawisa Rojanasaksothron¹, Treerayoot Wongkooprasert¹, Nunchalit Lerdprawat¹, Kritsada Boonpa¹, Nichapa Prasertpak¹, Thinapat Rojkanok¹, SauwananBumrerraj², Sirintip Boonjaraspinyo²

¹5th year medical students, ²Department of community medicine Faculty of medicine, KhonKaen University

Background and Objective: Thailand has the highest incidence rate of cholangiocarcinoma in the world. Previous studies on the knowledge of this disease were mostly performed in the middle-aged population. However, college students, who are expected to receive sufficient knowledge from the preventive campaign of this disease which has been launched since the past ten years, have not been explored for their knowledge. This study aimed to examine proportions of KhonKaen University students: 1) who had sufficient knowledge about food and food preparation that increase risk of *Opisthorchisviverrini* infection and cholangiocarcinoma; 2) who had sufficient knowledge about *Opisthorchisviverrini* infection and cholangiocarcinoma; and 3) types of food and food preparation related to these diseases but commonly misunderstood.

Method: This was a descriptive study, at KhonKaen University. A total of 357 undergraduate students who live in the campus were recruited using a systematic sampling from a total of 9,689 people. Tools and measurement: a self-administered questionnaire. Data analyses: SPSS v. 19 and Epi Info v. 3.5.4 were used to analyzed proportions, frequency and 95% Confidence interval.

Results: The response rate was 93.83 % (335/357). In all, 12 (3.7%, 95%CI: 1.99, 6.47) students had sufficient knowledge about food and food preparation that increase

risk of *Opisthorchisviverrini* infection and cholangiocarcinoma. The number of students who had sufficient knowledge about food at risk of *Opisthorchisviverrini* infection was 82 (24.6%). A total of 202 persons (61.0%) misunderstood about food preparation, of which the most common misunderstood method was soft-boiled. The most frequently reported misunderstood types of food included cooked fermented fish, pickled crab and raw shrimp. Forty one persons (12.3%) reported misunderstood about nitrosamine-rich food.

Conclusion: There was a small number of KhonKaen University students having sufficient knowledge regarding *Opisthorchisviverrini* infection and cholangiocarcinoma. The most common reported insufficient knowledge were nitrosamine-rich food and food that had metacercaria of liver fluke.

Keywords: *Opisthorchisviverrini* infection, cholangiocarcinoma, food, food preparation, Khon Kaen University students

