

CHAPTER I



INTRODUCTION

1.1 Justification and Problem Statement

Liver fluke infestation has been considered an important public health problem, affecting people's well-being. In short term, the symptoms are not severe but in long term the patient becomes weak with chronic morbidity. The long inhabitancy of the fluke causes blockage of bile duct and liver cancer. Subsequent treatment cost is considerably high, affecting the country's overall development including public health, economic, education, and social development.

According to the epidemiological survey of Communicable Disease Control (CDC) Department during 1980 – 1981, it was found that the prevalence of the disease in Thailand was 17% or about 7 million people. The highest prevalence was in the northeast (34.6%), the central (6.34%), and the north (5.59%) but in the south, there was no presence of the problem. (Manual of Liver Fluke Control for Public Health Worker, Communicable Disease Control Department, Ministry of Public Health, 1993)

As a result, the ministry of public health had started campaign on prevention and control seriously and continually in the northeast since 1984. In 1991, the survey revealed that the nationwide prevalence mean was 15.21% and it was reduced to

24.0% in the northeast. But in the central it increased to 7.30% and remarkably increased in the north to 22.8%. This shows that Liver fluke is no longer endemic public health problem of the northeast, but tends to become that of the north as well.

In the 7th National Economic and Social Development Plan (1992 - 1996), a plan for liver fluke control was developed in order to reduce the prevalence in all age groups, average of nationwide less than 10% and the regional targets as follows.

- Northeast, reduce to less than 20%
- North, reduce to less than 5%
- Central, no more incidence

And second objectives are as follows.

- Stool examination for case finding in the northeast not less than 35% of population annually, and 10% in the north
- Campaign against raw or half-cooked fish consumption to be targets not less than 85% of population
- Promotion of toilet existence and toilet use in not less than 95% of the households.

The implementation of the plan of CDC Department is systematically and continually integrated into the communicable disease control work of all regional, provincial, and district public health offices and all health centers in terms of human resource development, the provision of material, equipment, medication, health education media promotion and budget allocation.

Phayao is a province in the north of Thailand facing this problem. The survey in 1987 – 1989 showed the prevalence of 3.85, 3.25, and 4.23% respectively. But the survey in 1994 – 1997, showed that the prevalence greatly increased to 41.36, 31.45, 28.53, and 43.66% respectively. The incidence took place in all areas. One of the supporting factors of liver fluke is the existence of fresh water resources with abundant fishes such as Phayao Lake, Ing River, etc. Moreover, people like to eat raw or half-cooked meat and fish. (Annual Report, Phayao Public Health Office, 1994 - 1997)

Chiangkham is a district in Phayao province with high prevalence of liver fluke, and it was one of the top five public health problems ever since. Nevertheless, prevention and control has been seriously and continually implemented resulting in satisfactory outcome. The prevalence tended to decline. When surveyed in 1994 - 1997, the prevalence was 47.78, 32.76, 25.60, and 26.32% respectively. (Annual Report, Chiangkham Public Health Office, 1998)

Focusing on local incidence, it was found that in the elevated area of hill tribe people, who was a minority group of Chiangkham district, the incidence tended to rise yearly. During the survey in 1994, the prevalence of elevated area was only 4.33% but the incidence rose in the following year. The survey in 1994 – 1998 showed the incidence of 4.33, 5.42, 12.41, and 14.28% respectively.

This brought the following questions.

1. What are the knowledge, attitude, and practice of hill tribe people about liver fluke prevention and control?

2. What are factors associated with the raw or half-cooked freshwater fish consumption practice of hill tribe people?

Therefore, a study was done in a “Yao“hill tribe community in Moo 16, Tumbon Romyen, Chiangkham district, Phayao province where a rising incidence took place.

Table 1 : Infection rate of liver fluke in Ban Tonpeung, Moo 16, Tumbon Romyen, Chiangkham district, Phayao province in 1995 – 1998

Year	Liver fluke infestation rate (%)
1995	25.94
1996	20.15
1997	21.95
1998	22.65
1999	22.06

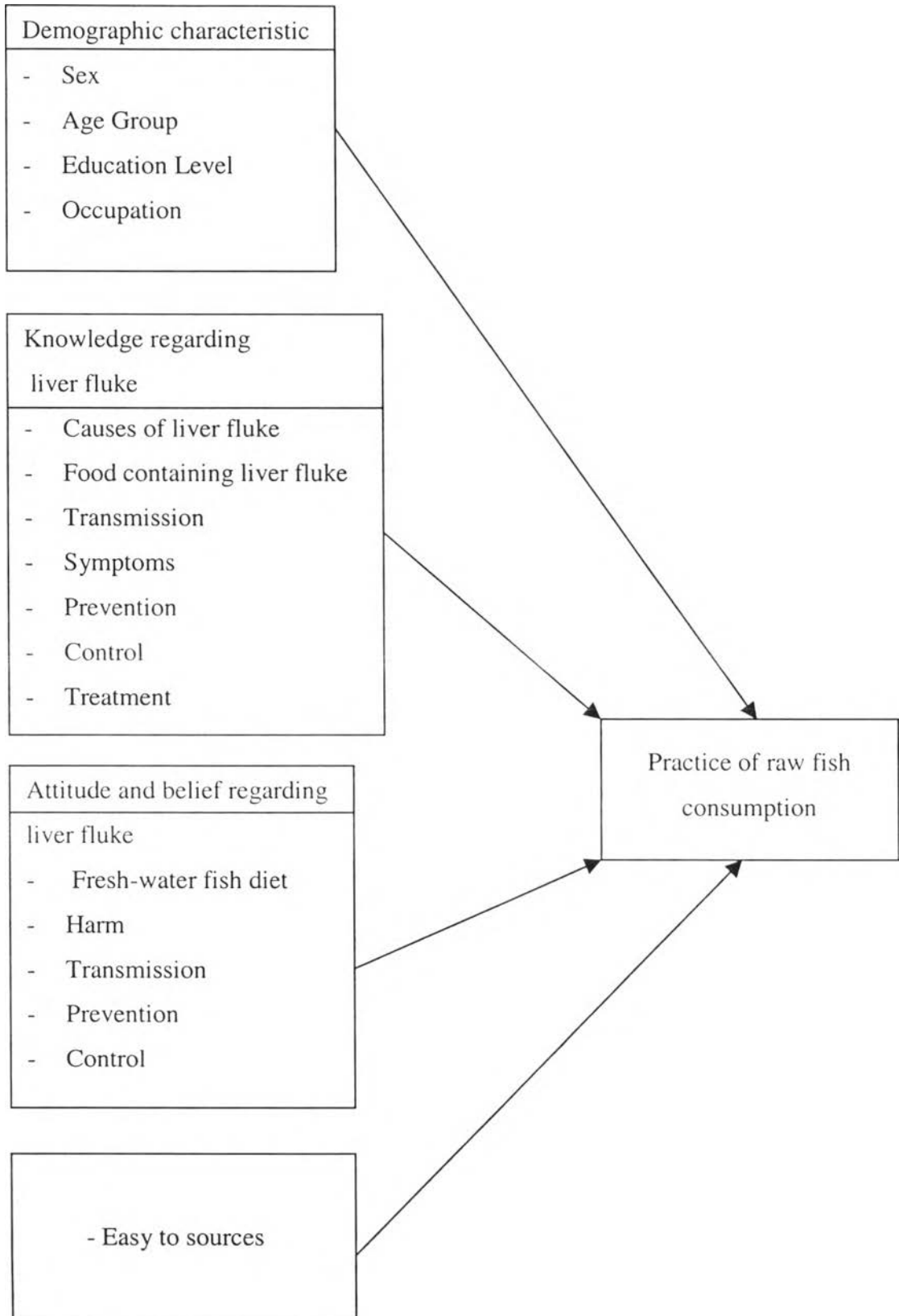
Source: Academic section, Chiangkham District Public Health Office, Phayao province

The expectation was to apply the outcome of this study for liver fluke prevention and control intervention in hilly areas or other areas in the future.

1.2 Objectives

1. To determine hill tribe community's knowledge and attitude toward problem of liver fluke
2. To assess hill tribe community's consumption prevention practice related to problem of liver fluke
3. To describe relationship between
 - demographic characteristics and consumption practice
 - knowledge related to problem of liver fluke
 - attitudes related to problem of liver fluke

1.3 Conceptual Framework



1.4 Operational Definition of Term

1. Knowledge means Knowledge regarding liver fluke about pathogen, transmission, harm and symptom, prevention and control and treatment.
2. Attitude means Attitude and belief regarding liver fluke about freshwater fish diet, harm, transmission ,prevention and control of liver fluke with 3 choices each; agree, uncertain, and disagree
 - Agree means this message is harmonious to personal feeling, opinion, or belief of respondent
 - Uncertain means this message is not harmonious to personal feeling, opinion, or belief of respondent but no objection
 - Disagree means this message is not harmonious to personal feeling, opinion, or belief
3. Practice means Practice regarding liver fluke, i.e., raw fish consumption, prevent and control, liver fluke detection, toilet use.
4. Hill tribe community means Hill tribe people only “yao nationality” at Ban Tonpeung, Tumbol Romyen, Chiangkham District, Phayao Province.
5. Demographic characteristic means Specific characteristic of sample group
 - Sex = Male and Female
 - Educational level = The highest education of sample group
 1. Never attended school
 2. Primary school
 3. Secondary school or higher
 - Age group
 - Occupation = The major occupation of sample group
6. Liver fluke means only kind of *Opisthorchis viverrini*