

CHAPTER I

INTRODUCTION

Tuberculosis (TB) is widely accepted as a public health problem. The cause of TB is the *Mycobacterium tuberculosis* that can chiefly damage human's lungs or other parts of the body included larynx, lymph nodes, pleura, brain, joints, kidneys and bone (CDC, 1995). According to the report of World Health Organization (WHO), 8 millions people worldwide are estimated to develop TB and 3 million death from TB each year cases (WHO,1998).

Thailand also has its trouble situation concerning TB control. In 2001, the Department of Communicable Disease Control (CDC), Ministry of public health (MoPH), Thailand has reported that each cases of TB patients was worsening close to 65/100,000 in 1991 as far as 78/100,000 in 1999. In addition to this the rate of smear positive pulmonary TB (PTB) patients was increasing by 33.4/100,000 in 1991 to 38/100,000 in 1999. The TB fatality rate was 5.6-7.7/100,000 every year in the 1990s, also. Together with the approximate 15% of TB patients are contacted with Human Immunodeficiency Virus (HIV) (CDC and WHO,1999). These numbers illustrate outspread serious affliction we have been facing in the past, nowadays and in the very near future.

The National Tuberculosis Program (NTP) Thailand has endured a proficient program in fulfilling the adjustment of TB control strategy known as Directly Observe Therapy Short-Course (DOTS). World Health Organisation's has proposed DOTS program to manage and treat TB patients in the act of practicing acquiescence in the direction to increase cured rate. This compliance is the succeeding of the recommended course of treatment in which TB patients have necessarily taken all the prescribed medications for the entire length of time. Cure rate is the fixed amount of

patients with their prior positive sputum and completed treatment, being sputum negative at least twice and sputum negative at the end of treatment (MoPH, 1998). DOTS have its practices by its supervision and efficient monitoring from the outcome of treatment (WHO, 1999).

In 1996, DOTS was introduced into eight model districts in the Northern of Thailand. WHO had located the excellent result of the cured rate at 83% which retained from patients in the eight model districts. Painstakingly, DOTS has covered up to twelve regional CDC offices in all areas of Thailand (Payanandana, V., Kladphuang, B., Somsong, W., and Jittimane, S., 1999).

The Zonal Tuberculosis Center 3 (ZTC 3) Chon Buri is a subsidiary of CDC 3. CDC 3 is one of 12 Regional CDC offices covering the procedure in 7 provinces included, Chon Buri, Rayong, Chanthaburi, Trat, Chachoengsao, Prachin Buri, and Sa kaeo. ZTC 3 has two main activities, which acted simultaneously in the office and in the range activities. The office activities covered the screening and diagnosing the suspected TB patients, who previously have had hemoptysis or have been coughing for more than three weeks. The sputum Acid Fast Bacilli (AFB) will be smeared the specimens for 3 times in 2 days. In addition, once founded that the result is positive, chest x-rayed is introduced, and may develop with the onset of appropriate anti-TB drugs. Secondly, health education for patients and their family members about disease, transmission, treatment and side effects of anti-TB drugs plus general principle of patient self-health care and case holding is applied. Along with the field activities, this is supply logistic of drugs, equipment for orderly province we responsible for 7 model provinces, then may supervise and evaluate Zonal TB situation later (CDC 3, 1999).

ZTC 3 use DOTS strategy to treat and control TB dispread. After using DOTS program, the cured rate of PTB smear positive has been improving from 50% to 70% in 1996-2000 (CDC 3, 2001) In contrast, the cure rate was still lower than the NTP standard, which is 85% (TB division, 2001). This is by virtue DOTS's strategy which used to improve compliance. Though ZTC 3 is applied DOTS to expand the cured

and completed treatment rate among the PTB patients sputum smear positive and negative. Thus, this DOTS is applied in ZTC 3 for patients who live at Muang district in Chon Buri province.

Home visit is a public health service that is facilitated for patients. Health workers are expected to provide health education, observe patients and confer about health problems at patients' home (Tuntitaveechok, 1996). The objective of this proposal is to evaluate the efficacy of the "Home visit" existing DOTS among the TB patients in ZTC 3 by acceding, keeping appointments, and treatment's outcome.

In chapter two, this thesis presents the review of literatures on tuberculosis, DOTS, home visit, health education terms. I also analyze the low cure rate problem of TB patients in ZTC 3, Chon Buri.

In chapter three, The proposal which is conducted to collect information to develop the process in this service. The main objective of proposal was to increase the effectiveness of DOTS strategy by home visit in TB patients groups who was treated at ZTC 3 Chon Buri.

In chapter four, the data exercise in ZTC 3: Muang district, Chon Buri provide is explained. Data exercise will be based on the numbers of PTB patients who registered at ZTC 3 and who lived in Muang district, Chon Buri with home visit existing DOTS activities. Furthermore, grouped compliance is evaluated of its behavior to score transference, to keep the appointment, conversion and cure rate. Also to complete the treatment rate among the sample group is formulated. These data show that home visit was a technique that can improve the compliance of treatment. After all, it is hoped that home visit existing DOTS will conduct over 85% of cure and will complete treatment rates in PTB patients sputum smear positive and negative, respectively (CDC, 1997).

In chapter five, presentation of the proposal "Home visit existing DOTS: A strategy to increase the cure and complete treatment rates among the PTB patients

who registered in ZTC 3 Chon Buri". This proposal included only PTB patients and who lived in Muang district, Chon Buri and registered in the program. The others who had not registered will be referred to their nearby hospital. The performance reveals the significance of TB disease, its control strategy, data exercise finding, advantages of home visit existing DOTS, obstacles, limitations, and recommendations. This could be evaluated at the closing conformation of compliance, keeping appointment, cure and complete treatment rates.

In chapter six, annotated bibliographies are given.

Reference:

Department of Communicable Disease Control & World Health Organization, (1999).

2nd Review of the National Tuberculosis Program in Thailand, July 1999.

Document WHO/CDS/TB/99.273, World Health Organization, Geneva.

Payanandana, V., Kladphuang, B., Somsong, W., and Jittimane, S., (1999). Battle against Tuberculosis, Tuberculosis Division, Department of Communicable Disease Control, Ministry of Public Health, Thailand : p. 8-9

Public Health Nursing, (1995). The role of community nurse, Faculty of Public Health Nursing, Chiangmai University

Tuberculosis Division, (2001). Management of Tuberculosis. Tuberculosis Division, Department of Communicable Disease Control, Ministry of Public Health, Thailand : p.1-2

World Health Organization, (1998). Effective diagnosis, treatment and control of tuberculosis. New Delhi. WHO, South East Asia Region Organization.

World Health Organization, (1998). The world Health Organization report 1998. Life in the 21st century a vision for all. World Health Organization , France.

World Health Organization, (1999). Stop TB Initiatives, and Challenges and Opportunities at the control level: Report of Regional meeting, Yangoon, Mynmmar. New Delhi. South East Asia Region.