



16 DEC 1991

A HOSPITAL BASED CASE-CONTROL STUDY OF BEHAVIORAL  
RISK FACTORS FOR ADULT PULMONARY TUBERCULOSIS  
IN THAILAND

DIRGH SINGH BAM

ดิเรก สิงห์บาม

รท

มหาวิทยาลัยมหิดล

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF SCIENCE  
(MEDICAL EPIDEMIOLOGY)

IN

FACULTY OF GRADUATE STUDIES

MAHIDOL UNIVERSITY

1991

**Thesis Title:** A Hospital-Based Case-Control Study of Behavioral Risk Factors for Adult Pulmonary Tuberculosis in Thailand.

**Name:** Dirgh Singh Bam

**Degree:** Master of Science (Medical Epidemiology)

**Thesis Supervisory Committee:**

Wijitr Fungladda, M.D., D.T.M. & H., Dr. P.H.

Somchai Supanvanich, M.D., M.P.H., M.P.H. & T.M.

Porapan Punyaratabandhu, M.D., M.P.H., M.H.S.

Amornrath Podhipak, B.Sc., M.Sc. Ph.D. (Epid.)

**Date of Graduation:** 29 April B.E. 2534 (1991)

#### ABSTRACT

A hospital based case - control study was conducted at the Cental Chest Hospital-Nonthaburi and at the Zonal TB Centre 2, Saraburi Province, in order to determine the behavioral risk factors for adult pulmonary tuberculosis. A total number of the study subjects was 300, 150 cases and 150 controls. The cases were sputum smear positive for A.F.B. and positive chest X-ray for TB, while controls were sputum smear negative for A.F.B. and negative chest-X-ray for TB. The cases and controls were interviewed by using a structured interview schedule, which included socio-demographic variables, BCG vaccination, alcohol drinking and cigarette smoking habit. Cigarette smoking and alcohol drinking were considered to be the risk factors for

tuberculosis with OR 8.20 (95% CI 4.72, 14.40) and 6.26 (3.66, 10.77) respectively. After stratifying by age, sex, marital status, agricultural occupation, BCG vaccination, by using Mantel-Haenszel method, smoking status and alcohol drinking still showed a significant association with tuberculosis occurrence. BCG vaccination seemed to show a protective effect against tuberculosis occurrence with crude OR 0.55 (0.45, 1.18). When stratifying by age, sex, smoking and alcohol drinking, BCG vaccination showed no significant protective effect against tuberculosis occurrence.