CHAPTER III

RESEARCH METHODOLOGY

This research was done as a descriptive cross-sectional study by collecting death information between October 2000 and September 2001, and using the death certificate as the source of major information. The research procedures were as follows:

3.1 The preparation of death information in Maejai District, Phayao Province

- target population: the decedents who registered at Mae Jai District, Phayao Province, and died between October 2000 and September 2001,
- Utilized data: information obtained from death certificates recorded by the Office of People Registration, the Central Registration Office, the Ministry of Interior, with a total of 250 cases.

Target population were these 250 cases, their utilized information consisted of age, gender, place of death which was considered either at the hospital or at home, residential, and cause of death as reported on the death certificate.

3.2 Data Collection

250 target population were derived from death certificates and was divided into 2 groups asfollows:

Group 1: 83 decedents who had their illness and treatment records at Mae Jai Hospital. Information collection was done at the hospital with the cooperation of physicians, nurses, and medical statistic officers. By recording information and re-checking causes of death in accordant to "the manual of writing and coding causes of death as the principle of ICD 10 illness list", 1998, the Planning and Policy Department, and the Ministry of Health. Including the recording form which was used to record treatment of illnesses of the decedents (details as shown in appendix) which contains general information, treatment records such as blood test, sputum diagnosis, sugar test, x-ray, EKG, etc.

Group 2: 167 decedents who had no treatment records at Mae Jai Hospital or had the records but not sufficient for diagnosis of the cause of death. Information collection was done with the cooperation of health centers' personnel in Mae Jai District. By interviewing decedents' relatives in accordant to "the Manual of investigating cause of death with the interview by non-physician personnel", 1998, the Planning and Policy Department, the Ministry of Health, including the interview form (details as shown in appendix), its contents contain the following:

Part 1: general information of interviewee, such as, name, surname, residence, age, gender, relationship with the decedent, and length of time of being close to the decedent.

Part 2: general information of the decedent, such as, name, surname, identification numbers, age, gender, marital status, and occupation.

Part 3: information related to the death of a decedent and treatment records, such as, illness and treatment history, surgery, place, time and condition of death.

Part 4: supportive information or activation on illness of a decedent, such as, smoking and/or drinking behavior, using abusive drugs, and mental status.

Part 5: conclusion of the cause of death from physician's diagnosis.

Part 6: information on the causes of death from the death certificate, such as, cause of death, the person who recorded the death on the medical death certification, and the person who reported the death.

3.3 Training Personnel on Data Collection

Prior to data collection, there was a one-day meeting to inform personnel at Maejai Hospital, concerning knowledge and understanding on writing causes of death in accordance with ICD –10 including how to fill in medical death certificate. And to health center personnel on the use of the manual of the investigation on causes of death,

how to define a disease and "scope of decision making", and interview method in order to obtain the most reliable information.

3.4 Diagnosis the Cause of Death

Information derived from medical records at the hospital and the investigation form on the cause of death that was collected from the interviews. The information contained treatment records whereby a decedent died or his/her relative identified whereby a decedent was formally admitted for medical treatment, which led to the process of cause of death diagnosis as:

3.4.1 The record of the treatment history of a decedent from medical statistic of the hospital which contained: part 1: information obtained from death certificate as to gender; age of death; residence; date of death; and cause of death, part 2: illness history before death, diagnosis on symptoms, duration of the suffering of each symptom, this information was considered and the diagnosis as cause of death by physicians of Maejai Hospital. This may be double checked on the past treatment as being the information based to assist the diagnosis of the cause of death. The diagnosis of the cause of death depended mainly on the history mentioned above and the consideration of the physicians.

3.4.2 Cause of death investigation form that was collected from the interviews. The physicians of Maejai Hospital would be the ones who investigate illness and treatment history and also follow each treatment history from clinics or hospitals as much as possible.

Then they would give their opinion as to the cause of death, conditions and limitations were basically up to the interview history and treatment history and the consideration of the physicians.

3.4.3 The information diagnosed for cause of death would be transferred for coding as ICD-10 at Information Center, Phayao Provincial Health Office for further analysis.

3.5 Data Analysis

After the collection of all data of the 250 study cases, information was analyzed in regards to percentage and death rate according to its cause by comparing information from the death certificate and information obtained from the cause of death investigation.