CHAPTER VI
CONCLUSION AND RECOMMENDATION

This wasa cross-sectional study. Objectives were finding prevalence of disease and factors about person, family, risk behavior, health affecting to dementia among elders in Lampang province. Data was collectedfrom four districts, consisting of Muang, Hang Chat, Mae Tha, and Mae Prick fromAugusttoNovember, 2013. The samples included 400 elders and 400 caregivers.

The dementia screening test consistedof MMSE-Thai 2002 that assessed the elders and the modified Informant Questionnaire on Cognitive Decline in the Elderly (modified IQCODE) that interviewed the informant. Then dementia status was evaluated results of screening by multiple tests in parallel.

The statistic analysis used descriptive statistics, univariate analysis and multivariate analysis with 0.05 statistical significance.

6.1 Conclusion

From 400 samples, the prevalence of dementia was35.5, most of them were female (68.9%) age 71-80 years old (42.0%) average of ages was 76 years old. Marital statuswas cohabitation (50.5%) in an extended family with children, grandchild and relatives (54.1%). only few number of staying alone (5.5%). Sample who had a family member with a history of dementia 5.6%. Education was primary school (61.1%), illiteracy (32.5%) secondary school (3.9%) Career (before age of 60) was agriculture (65.3%), herder(13%) trade (3.8%). 188 samples were still workingafter 60 years old (42.7%) divided into agriculture (59.0%) employee (16.0%) basketwork (11.7%). Most of their job characteristic depended on the labor more than academic/ creative. Owing to their agricultural career, there were history of exposure to organic solvent such as pesticide and insecticide (38%). Income was less than 1,000 Baht / month. Elders depended on elder allowance. Loss experiences of spouse were

death (44.1%) and divorce (3.2%). Daily activity by oneself most of subject was good (51.4%), very good (39.8%). Social support for sample was enough (84.1%). Leisure activities were participating in elder club (regular 37.7%, never 34.1%), visiting neighborhood (75.4%), participating in village traditions for example ordaining, new house, funeral, (77.3%) religious activities (55.9%). Most of subjects was no exercise (31.8%), half of study sample was never walking for exercise but doing the housework for sometimes (59.8%). Subjects focused on eating fiber food (51.4%), eating fish sometimes (53.4%). Risk factors in this study were hypertension (46.8%), diabetes mellitus (16.6%), dyslipidemia (22.7%). Subjects had a treatment by medicine (>84%) continually medicine (>97%). Smoking of sample (15.5%), drinking (9.5%), BMI of sample was normal BMI (47.7%) lower BMI (8.2%) and over weight (17.3%) and obesity (6.8%).

This study found from univariate analysis that 23 variables were statistically associated with dementia following; age 71-80 years old (OR=2.36) and age > 80 years old (OR=5.61), marital status (OR=1.60), education (OR=1.71), occupation (after 60 years old) (1.21), income 1,000-2,000 bath/month (OR=4.61) and < 1,000 (OR=3.70), daily activity level following: good level (OR=2.21) and fair/poor level (OR=16.48), life crisis event following child death (OR=1.61), caregiver (OR= 4.20), leisure activity following: never participating in elderly club (OR=2.87), never visiting neighborhood (OR=8.73), sometime visiting neighborhood (OR=2.11), never participating in village traditions (OR=14.18), sometime participating in village traditions (OR= 2.19) religion activities in sometime (OR=11.28),having a family member with a history of dementia (OR=4.55), living arrangement (OR=1.70), alcohol consumption (OR=0.42), smoke (OR=2.03), exercise (OR=2.83), doing housework (OR=1.73), food consumption following: rarely/never fat intake (OR=0.50) always fat intake (OR=0.36), fish intake (OR=0.01), history of organic solvent exposure (OR=0.51), having diabetes mellitus (OR=0.56), BMI (OR=2.13).

Moreover, this study found from both univariate and multivariate analysis that 6 variables were statistically associated with dementia following: being aged higher than 80 years old (ORadj=2.93, 95%CI 1.21-7.11), being no education (ORadj=2.24, 95%CI 1.23-4.09), being fair/poor daily activity level (ORadj=5.53, 95%CI 1.42-24.02), being had a family member with a history of dementia

(ORadj=7.90, 95%CI 2.30-27.11), being did not have participating in village traditions (ORadj=7.17, 95%CI 1.57-32.71), being diabetes mellitus (ORadj=0.33, 95%CI 0.135-0.82).

6.2 Recommendations for this study

1. From study found that elders who have positive screening test were a lot of number that should get a further diagnose but the problems was patient in dementia needed specialist doctors for treatment such as neurology, psychiatrist, geriatrics, or experienced doctors including diagnostic radiology, and laboratory test. This made diagnose of dementia took not only time and resource but alsodifficulty. Therefore, after screening test it should have retest a person who had positive result with mental state examination (high specificity) for accuracy result leading to diagnose by specialist.

2. From study found that the more age was the more dementia opportunity grew, therefore family or caregiver, community unit, and public health personal should prepare for protection and remedy.

- Physical health support such as a protection and treatment of diabetes, hypertension, obesity, and depressive disorderby exercise, thought is activity, including mind care of elders for protecting dementia early and for good result in a long run.

- Preparation for encountering disease situation of dementia incoming with elders society for example giving information to elders, families, communities, and planning to take care of them that will be more and more.

- Monitoring dementia situation by screening test continually every year.

3. From study found that dementia associated no education was the more opportunity to be dementia, therefore public health personnel should giving information about dementia such as risk factor, protection, occurrence for taking care of their health and reducing risk factor of dementia to elders, families, communities. This information may also be useful in helping to plan for future problems that may

develop as a result of dementia. Moreover, the public health personnel should surveillance in this group.

4. From study found that dementia associated who had fair/poor daily activity level was opportunity to be dementia. So family or caregiver, community unit, and public health personal should prepare for protection and promotion physical and mental health. It was not only make physical and mental activity more enjoyable and it can reduce stress levels, isolation and depression.The supporting by family member such as take elder to travel by wheelchair.Community unit such as participating community's activities, playing music, singing etc.The public health personnel should hold a home visiting to give information about health care.

5. From study found that dementia associated to family record, if family member has dementia, it should monitor elders with screening test continually to direct relatives by giving information to family having member with dementia such as risk factor, protection, occurrence for taking care of their health and reducing risk factor of dementia on oneself and family member.

6. From study found that regular participating to social activity protects dementia in elders. The supporting elders to regularly join social activities should be done by family member such as together having meal, travel, participating community's activities, old dancing, playing music, etc. Moreover, the doctor should hold a meeting to give information about health care.

7. From study found that diabetes patients could reduce dementia since the patients had got a regular treatment with well taking care of themselves. The patients should be cured with medicine, diet, regular checking for controlling diabetes, and reducing the risk of dementia.

6.3 Recommendations for the further study

1. The study found the limitation of MMSE Thai-2002 that it cannot use with hand-disable in the visuoconstruction part of the elders. Thus, further study should added more eligible criteria about drawing ability, or if the elderly do not want to draw by pen, or pencil the technology gadgets such as draw a line with finger on iPad or smart phone could be assisted.

2. From study found that many informant need example word about unusual word so further study should be researcher should be give example word about the item in “understanding the meaning of unusual word” for more understanding when use modified IQCODE.

3. From the cross-sectional study aimed to find prevalence of disease and factors relating to dementia in elders, there was no relation of dependent variable and independent variable, especially modified factor m that varied upon time.To test factors affected to dementia in elders, further study should use other analytical methods such as case control study or cohort study.

4. From study found that proportion of population (sex and age) were rather different than Lampang population so further study should scope the sample to be familiar to real proportion of population in Lampang for being a representation of area.

5. The using of 2 dementia screening test together should be also evaluated the agreement of them for considering the preformat of test.

6. From study found that69 persons who had a screening test by multiple tests(series) gave positive results. These persons should be diagnosed by specialist doctor for recheck and get a treatment in time.