# Factors Affecting to Medication Used Behaviors in Middle-Aged Persons at Champasak Province of the Lao People's Democratic Republic.

Watanya Jarriyawattanachaikul<sup>1</sup>, Phairote Polkaew<sup>1</sup>, Taungporn Kheawprachum<sup>2</sup>

<sup>1</sup>Faculty of Public Health, Chalermkarnchana College, Mueang Sri Sa Ket 33110

<sup>2</sup>Pharmacy department, Pramongkutklao Hospital 315 rajavithi road, Phaya Thai, Ratchathawee District, Bangkok 10400

#### Abstract

This study was investigated two factors affecting to medication used behaviors in 215 middle-aged (40 to 60 year) persons at Champasak province, Lao People's Democratic Republic (Lao PDR). Factors of this study were (i) the perception of health factor and (ii) social supporting from family. Subjects sampling selected by purposive sampling and collected data from questionnaire in LAO language. The reliability of the instrument was used Cronbach's alpha coefficient. The questionnaires were analyzed by descriptive statistics. From the results shown that health recognition in medication using classified as moderate level in health belief level (1.23± 0.64). Social supporting within family to medication used behaviors classified as high level in health belief level (1.86  $\pm$  0.37). Medication used behaviors classified as moderate level in behavior level (1.00 ± 0.71). In two factors composed of (i) Health perception for medication taking and (ii) social supporting from their family were correlated to correctly behavior medication. Correlation of health perception and social supporting to correction of medication used shows pearson's correlation value equal to 0.537 and 0.243, respectively. The statistical was significant at P value < 0.01. In application from this research could be reflected the lagging system to health problem in Lao PDR. Moreover, the government should determine the ways to solve this problem for the most effective of medication taking in the country.

**Keywords:** Medication used behaviors, middle-aged person, LAO People's Democratic Republic.

# 1. Introduction

In recent years, ASEAN Economic Community (AEC) is made an important role in all ASEAN's members. In term of relationship, Lao People's Democratic Republic (Lao PDR) and Thailand have several cooperation, for example, economic, industrial, agricultural, cultural, etc. As a result, we, not only, exchange some research based on education, but also, together solving some problems. At this point, the most important problem of Lao PDR is healthy problem on middle-aged person which is affected on developing of country in future. In the report, the group study of middle-

aged person show that when the body-balances are loss, the healthy problems are appear, for example, chronic illness, hypertension, diabetes, heart disease, etc. They must frequently take some doses about 47.30 %. Some of them must take more than 2 or 3 groups of dose. Accordingly, the risks of medication using are increased.

The behavior of using medication is affected on healthy problems. Especially, the patients in chronic illness groups could be continuously using drug. Then, when they get better, they mostly stop using or decreasing their drug by themselves. Those behaviors affect on healthy problems, and also, expense from small scale to large scale. Consequently, the Lao PDR's government have to spend more on public health.

Medication taking is one of the health behaviors which are necessary for a self-protection from diseases. Belief is making motivation that becomes the health belief. Normally, belief is embedded in each person which can be perceived by ourselves. For instance, if someone believes in something, he or she will behave like they thought. In following, Becker describes the health belief of each person by using health belief model. The model is focusing on motivation of the health belief that affects to each person in different relations. First, the perception of persons is that if persons perceive and belief that they have the risk of disease. As a result, the people will be taken more suffer from diseases. Second, the additional factor of person is additional factors which can be affected both positive and negative to each people, for example, gender, age, education, environment, etc. Third, the possibility factor of person is the decision factor from the experiences of person which depends on the usefulness and harmfulness of each person's knowledge. Becker investigate that the possibility factor of usefulness, the possibility factor of harmfulness, the additional factors and the perception show 91%, 81%,77% and 59%, respectively.

Consequently, the objective of this research is to study the perception factor of health in term of medication taking and supporting factor from their family which affects to medication behaviors of adults at Champasak province, Lao PDR.

# 2. Objectives of study

- 2.1 To study health recognition factor to medication using in middle-aged persons at Champasak province of the Lao PDR.
- 2.2 To study social support factor within family to medication used behaviors in middle-aged persons at Champasak province of the Lao PDR.

# 3. Method

# 3.1 Study sample

Subjects were 215 patient in middle-aged (40 to 60-years old) at Champasak province of the Lao PDR, selected by purposive sampling. All of people in Champasak province of the Lao PDR had 89,842 persons who were middleaged persons 14,400 persons (16.03%). Calculation of sample sizes by Daniel formular.

#### 3.2 Instruments

Research instrument used were a questionnaire in LAO language and divided into 4 parts. Researchers team were asked to complete a questionnaire that covered 4 parts: (i) Demographic characteristics personal were included sex, age, education, marriage status, revenue, amount of member family and family condition (i) Health recognition in medication using had 26 questions.

All of question were divided to 9 sections and composed of 1. Past health recognition (3 question), 2. Present health recognition (2 question), 3. Present health recognition when were compared (3 question), 4.Future health recognition (3 question), 5. Health attention (3 question), 6. Health awareness (3 question), 7.Resistance or probability risk to illness (3question), 8. Severity perception of illness (3 question) and 9.Understanding to Disease or illness 3 question. (ii) Social supporting within family to medication used behaviors had 20 questions. All of question were divided to 3 sections and composed of 1. Social supporting in emotional section (8 question), 2. Social supporting in information section (5 question) and 3. Social supporting in resourcesection (7 question). (iii) Medication used behaviors had 20 questions.

#### 3.3 Statistical analysis

Analyses were conducted using SPSS (Statistical Package for the Social Science) for Windows. Significant level was control at the P<0.05. For data composed:

- Frequency and percentage of demographic characteristics personal data.
- Percentage, average, SD of health recognition in the part of medication data, Social supporting within family to medication used behaviors and Medication used behaviors data
- Data interpretation: if average at 0.00 0.66 was low level, 0.66-1.34 was moderate level and 1.34-2.00 was high level.

# 3.4 Quality determination of instrument

- 3.4.1 Content validity was verified by 3 proficient people who were Assoc. Prof. Dr. Chalermpol tansakul (Dean of Faculty of Public Health, Chalermkarnchana College), Dr. Nipon manasatitpong (Associate dean of Faculty of Public Health, Chalermkarnchana College) and Rasamee Sripun M.D. (Director of epidemiology department at Champasak province of the Lao PDR.
- 3.4.2 Instrument validity was used 30 questionnaires with sample test that were characteristic similarly with subjects. Validity value of health recognition in the part of medication data, social supporting within family to medication used behaviors and Medication used behaviors data were 0.57, 0.65 and 0.83, respectively from Cronbach's alpha coefficient formular.

#### 4. Results

# 4.1 Demographic characteristics personal.

From 215 subjects were classified as 93 male (43.30 %), 122 female (56.7 %) and married 195 persons (90.70%). Most education subjects graduated from junior high school and high school which were 110 peoples (51.10%). The average incomes per family were 1-5 million Kip or 92.10 % (estimated 3,800-18,000 Baht). The living life styles of subjects had at least 4 peoples per family. Due to the subjects' sample of Lao PDR were adults. As a result, it was highly influencing to the developing of economic in long run growth.

# 4.2 Health recognition in medication using.

Health recognition in medication using classified as moderate level in health belief level  $(1.23\pm0.64)$  data shown in table 1. Data results composed of 9 sections were (1) Past health recognition (High level,  $1.46\pm0.72$ ), (2) Present health recognition (Moderate level,  $1.25\pm0.83$ ), (3) Present health recognition when were compared (Moderate level,  $1.05\pm0.86$ ), (4) Future health recognition (Moderate level,  $1.02\pm0.53$ ), (5) Health attention (Low level,  $0.15\pm0.47$ ), (6) Health awareness (High level,  $1.87\pm0.26$ ), (7) Resistance or probability risk to illness (Moderate level,  $1.17\pm0.75$ , (8) Severity perception of illness (High level,  $1.79\pm0.28$ ) and (9) Understanding to Disease or illness (High level,  $1.22\pm0.93$ ).

# 4.3 Social supporting within family to medication used behaviors.

Social supporting within family to medication used behaviors classified as high level in health belief level ( $1.86 \pm 0.37$ ) data shown in table 1. Data results composed of 3 sections were (1) Social supporting in emotional section (High level,  $1.99 \pm 0.08$ ), (2) Social supporting in information section (High level,  $1.87 \pm 0.45$ ) and (3) Social supporting in resource section (High level  $1.73 \pm 0.57$ ).

Table 1: Average, SD and Health belief level.

Variable	$\overline{X}$	SD	Health belief level
Health recognition in medication using.	1.23	0.64	Moderate
Social supporting within family to medication used behaviors.	1.86	0.37	High

#### 4.4 Medication used behaviors.

Medication used behaviors classified as moderate level in behavior level  $(1.00 \pm 0.71)$  data shown in table 2. From questionnaires, show that samples understand the basic of medication used, for instance, they could taking medication when illness in duration time before and after meals.

However, samples were wrong understanding that they could change amount of medication or stop taking from their diagnosis without following doctor's advice and borrow or share the medication from their neighbor.

**Table 2:** Average, SD and behavior level of medication used behaviors.

Variable	$\bar{X}$	SD	Health belief level
Correctly behavior medication used.	1.00	0.71	Moderate

# 5. Relationship of the health perception for medication taking and social supporting from their family to medication used behavior.

From the analysis, we investigate the correlation between the health perception for medication taking and social supporting from their family in correction of medication used.

The results of the relationship between the health perception for medication taking in correction of medication used shows pearson's correlation value equal to 0.537 and the significant equal to 0.000 ( $P\ value < 0.01$ ) as shown in table 3. The relationship between social supporting from their family in correction of medication used shows pearson's correlation value equal to 0.243 and the significant equal to 0.000 and ( $P\ value < 0.01$ ) as shown in table 4.

**Table 3:** Correlation between health recognition in medication using with correctly behavior medication using.

incurcution us	<del>-</del>		
Variable		Health	Correctly
		recognitio	behavior
		n in	medication
		medicatio	used
		n using	
Health	Health	1	.537(**)
recognition	recogniti	.000	.000
in	on in	215	215
medication	medicati		
using	on using		
Correctly	Pearson	.537(**)	1
behavior	correlatio	.000	.000
medication	n	215	215
used	Sig. (2-		
	tailed)		
	N		

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Table 4:** Correlation between social supporting within family to medication used behavior with correctly behavior medication using.

Variable		Health recognition in medication using	Correctly behavior medication used
Social supporting within family to medication used behaviors	Health recogniti on in medicati on using	1 .000 215	.243(**) .000 215
Correctly behavior medication used	Pearson correlatio n Sig. (2- tailed) N	.243(**) .000 215	1 .000 215

\*\* Correlation is significant at the 0.01 level (2-tailed).

The relationship between the health perception for medication taking and social supporting from their family shows pearson's correlation value equal to 0.198 and the significant equal to 0.004 ( $P\ value < 0.01$ ) as shown in table 5. Thus, all of the correlations show the significant value in term of statistical analysis.

**Table 5:** Correlation between health recognition in medication using with social supporting within family to medication used behavior.

taining to inequestion used behavior.			
Variable		Health	Correctly
		recognitio	behavior
		n in	medication
		medicatio	used
		n using	
Health	Health	1	.198(**)
recognition	recogniti	.000	.004
in	on in	215	215
medication	medicati		
using.	on using		
Social	Pearson	.198(**)	1
supporting	correlatio	.004	.000
within	n	215	215
family to	Sig. (2-		
medication	tailed)		
used	N		
behaviors.			

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

# 6. Conclusion

From the data we could divide into 2 factors which are the perception of health factor and social supporting from family. They have highly effected to medication taking behavior. Because, perception and belief of peoples when they are illness and supporting factors from their family, could be highly effected to the correction of medication taking. It is directly supported and activated to taking the medication on time, preparing the medication and taking care of patient. The results significantly show that the data are correlated with the factors which are the basis factor of subjects living with large family.

In application from this research could be reflected the lagging system to health problem in Lao PDR. Moreover, the government should determine the ways to solve this problem for the most effective of medication taking in the country.

# Acknowledgement:

The researchers received cooperation and funding support from cooperation research between Chalermkarnchana College (Thailand) and Ministry of Public Health at Champasak province of the Lao PDR.

#### References:

- [1] Severino, R. (2007). The ASEAN Developmental Divide and the Initiative for ASEAN Integration. *ASEAN Economic Bulletin*, 24.(1): 35-44.
- [2] Ferrie, J.E. (2003) Future uncertainty and socioeconomic inequalities in health: the Whitehall II study. *Soc Sci Med*, 57(4): 637-46.
- [3] Conner, M. & Norman, P. (1996). Predicting Health Behavior. Search and Practice with Social Cognition Models. Open University Press:

Ballmore: Buckingham.

- [4] Strand, P.J., & Jones, W. (1983). Health service utilization by Indochinese refugees. *Med Care*, **21**(11):1089–1098
- [5] Rosenstock, I. (1974). Historical Origins of the Health Belief Model. *Health Education Monographs*, 2(4).
- [6] Daniel, W.W. (1999). Biostatistics: A Foundation for Analysis in the Health Sciences. 7th edition. New York: John Wiley & Sons
- [7] Eisen, M et.al. (1992). A Health Belief Model
   Social Learning Theory Approach to
  Adolescents' Fertility Control: Findings from a
  Controlled Field Trial. Health Education Quarterly,
- [8] Glanz, K., Rimer, B.K. & Lewis, F.M. (2002). Health Behavior and Health Education. Theory, Research and Practice. San Fransisco: Wiley & Sons
- [9] Becker, M.H. (1974) The Health Belief Model and Personal Health. Behavior. *Health Education Monographs*. 2(4):409-17.