KNOWLEDGE AND ATTITUDE TOWARD THE SELECTION OF HEALTH INSURANCE TYPE AFTER RETIREMENT IN RATCHABURI PROVINCE, THAILAND

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ABSTRACT:

Background: Thailand has shifted to an aging society, the price of long-term care and healthcare services for the elderly is expensive. This study aimed to describe the level of knowledge, attitude toward the selection of health insurance type after retirement in Ratchaburi province, Thailand and the relationship among them.

Methods: Four hundred and thirty people aged between 50-59 years old who lived in Nhongree district, Ratchaburi province were interviewed by purposive selection with inclusion criteria of Thai population's age 50-59 years old under Universal Coverage Scheme's rights. The descriptive analyses were knowledge, attitude, and selection toward Universal Coverage Scheme (UCS) or private health insurance. Statistical analyses such as chi-square were used to explore the association among socio-demographic data, knowledge, attitude, and practice.

Results: Level of knowledge was significant at *p*-value <0.05 (*p*-value <0.001) with practice which most of poor group will use both UCS and private health insurance (50.7%). The $\chi 2$ value was 23.3. The relationship between attitude group and practice group was significant at *p*-value <0.05 (*p*-value <0.001) and the $\chi 2$ value was 25.8.

Conclusion: Poor level of knowledge and high level of attitude had association with buying private health insurance after retirement. Therefore, Thai government should provide more information about benefits from UCS.

Keywords: Universal Coverage Scheme, Private health insurance, Retirement, Thailand

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INTRODUCTION

During past several decades, Thailand has been one of the most successful countries in bringing down its fertility level and increased life expectancy at birth from 55.2 years to 69.9 years for men and 61.8 years to 74.9 years for women [1]. Thailand has now shifted to an "Aging Society". The older population or the population aged 60 and above increased from 1.5 million in 1960 to approximately 7.4 million in 2008; and it is expected to be 17.7 million in 2030 [2]. As the numbers of the older population that need healthcare and long-term care services increase, the public health insurance should be adjusted and reformed in order to meet the demands of people after retirement [3].

Currently, Thai citizens have access to public health insurance through one of three programs: the Civil Servant Medical Benefit Scheme (CSMBS), the Social Security Scheme (SSS) or the Social Health Insurance (SHI), and the Universal Coverage Scheme (UCS). The UCS is compulsory for all Thai citizens that are not insured by another public insurance scheme. The UCS replaces all previous

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government health insurance schemes from 2001, namely the Low Income Card (LIC) scheme for the poor, the Voluntary Health Card (VHC), the disabled, the elderly, and children aged less than 12 years. The CSMBS covers civil servants and their immediate family members, including spouse, parents, and up to three children under the age 20 years. It also covers retirees and their dependents. The SSS provide mandatory coverage for workers in the private business since 1991; when it applied to firms with more than 20 workers, its coverage has increased; and since 2010 it is mandatory for firms with more than one worker and for the self-employed. The number of workers insured increased from 3.2 in 1991 to 9.5 million in early of 2010, excluding dependents [4].

In Thailand, since the introduction of universal health coverage in 2001, the government has provided free healthcare for older persons in all government hospitals and health centers. It provides free medical services to persons aged 60 and above which can be accessed only by elderly who are poor and are under the universal coverage scheme. However, when people get sick or ill, they must go to primary health center first before secondary or tertiary hospital. This can make people unable to receive treatment in time. Therefore, private health insurance company come to take the solution from waiting or transferring to receive the treatment [5].

Many studies have projected that Thailand will shift to an aging society in the next ten years. Nowadays, the price of long-term care and healthcare services for the elderly is expensive; they might fall into poverty trap. There also some news reported that the UCS will be reform again in 2016. There was no study about this before. This study aimed to describe the level of knowledge, attitude toward the selection of health insurance type after retirement in Ratchaburi province and the relationship among them.

METHODOLOGY

Population

In 2016, a cross-sectional survey Nhongree district, Ratchaburi province one of the largest provinces of aging people in Thailand was conducted. The inclusion criteria were Thais aged between 50-59 years old under UCS health insurance schemes, and lived in Ratchaburi province at least 6 months. The sample size were calculate from Daneil's formula [6] got 384 samples. With estimated 10% add-up for non-participation and missing value. Thus, total sample size was 430. The samples were selected by purposive selection. The survey was conducted at respondent's home for their convenience.

For ethical approval to conduct this study, it sought from Ethics Review Committee of "Chulalongkorn University" (No.080/2559, date April 26, 2016). A cover letter explaining goal, procedures, and confidentiality accompanied the questionnaires. It was explained that participation was voluntary and refusal would have no sequences. Participants who agree to participate in the study would have been signed for consent form. Therefore, all respondents provided consent to the study, which 430 had valid questionnaires.

Data collection

A structured questionnaire was used to collect data regarding 1) The socio-demographic. 2) The knowledge of UCS and private health insurance. 3) The attitude of UCS and private health insurance. 4) The selection type of health insurance after retirement.

To approach the villagers at Nhongree district, first, researcher met with the head of Nhongree Primary Health Center for receive the name of health volunteer and number of villagers. Second, head of Nhongree Primary Health Center assigned work for health volunteer. Third, health volunteers were trained about each question from questionnaire. Last, health volunteer went to collect the data. This was the ordinary duty of health volunteer to visit each household every week. Therefore, during visit villagers health volunteer could collect the data at the same time.

The questionnaire was newly developed for this study. In knowledge part, it developed from the information of Ministry of Public Health (MoPH), Thailand and Office of Insurance Commission. Several experts helped to adapt and validate the tools, with IOC score of 0.67 and 1. For the reliability test, 30 sets of questionnaire were conducted at Muang district, Kanchanaburi province. The score of cronbach's alpha were 0.876 and 0.932. Health care volunteer from Nhongree's Primary Health Center were trained to conduct the survey. Written informed consent was obtained from all study respondents.

Data analysis

For data analysis, SPSS software version 22.0 (licensed for Chulalongkorn University) was used to analyze the data. For socio-demographic characteristics, knowledge, and attitude used

Table 1 Description of socio-demographic data

Characteristics	Frequency (n)	Percentage (%)
Total	**430**	**100**
Gender		
Male	167	38.8
Female	263	61.2
Age groups (years)		
50-53	176	40.9
54-56	128	29.8
57-59	126	29.3
Education level		
Primary school	311	72.3
Secondary school	48	11.2
High school	60	14.0
Bachelor's degree	11	2.6
>Bachelor's degree	0	0
Religion		
Buddhist	427	99.3
Christian	1	0.2
Islam	2	0.5
Occupation		
Employee	158	36.7
Merchant	94	21.9
Agriculture	99	23.0
Not working	46	10.7
Others	33	7.7
Personal income per month (Baht)		
< 15,000	232	54.0
15,001-20,000	140	32.6
20,001-25,000	29	6.7
25,001-30,000	16	3.7
>30,001	13	3.0
Family income per month (Baht)		
< 15,000	125	29.1
15,001-20,000	129	30.0
20,001-25,000	66	15.3
25,001-30,000	48	11.2
30,001-35,000	32	7.4
35,001-40,000	11	2.6
>40,000	19	4.4
Expenditure per month (Baht)		
< 10,000	185	43.0
10,001-20,000	143	33.3
20,001-25,000	57	13.3
25,001-30,000	36	8.4
30,001-35,000	6	1.4
35,001-40,000	3	0.7
>40,000	0	0
Marital status		
Single	39	9.1
Married	306	71.2
Divorced	24	5.6
Widowed	45	10.5
Separated	16	3.7

Table 1 Description of socio-demographic data (cont.)

Characteristics	Frequency (n)	Percentage (%)
Total	**430**	**100**
No. of children in family		
No children	62	14.4
1	75	17.4
2	199	46.3
3	84	19.5
>3	10	2.3

Table 2 Description of each practice question

Statement	Use		Not sure		Not use	
	N	%	N	%	N	%
After retirement, you will use UCS and buy private health insurance.	203	47.2	120	27.9	107	24.9

Table 3 Knowledge and attitude levels

Groups	Score	N	%	Mean	Median	Mode	SD	Min	Max
Knowledge									
Poor	0-18	221	51.4	15.09	16.00	18.00	2.90	4	18
Moderate	19-24	152	35.3	21.34	21.00	21.00	1.79	19	24
High	25-30	57	13.3	25.00	25.00	25.00	0.66	25	27
Attitude									
Low	1.00-1.66	0	0	0	0	0	0	0	0
Medium	1.67-2.33	32	7.4	1.99	2.00	2.00	0.14	1.75	2.30
High	2.34-3.00	398	92.6	2.90	3.00	3.00	0.15	2.40	3.00

descriptive statistic to find and present in frequency, percentage, mean, standard deviation, minimum and maximum. Inferential statistic is used to find the relationship between independent variables and dependent variables presented by using chi-square. The level of significant was *P*-value < 0.05

RESULTS

Based on data collected, respondents were female (61.2%), aged between 50 to 53 years old (40.9%), 72.3% finished primary school and were employee (36.7%). Most of respondents were Buddhist (99.3%). For personal monthly income, a greater number of respondents earned less than 15,000 baht per month (54.0%) and 15,001 to 20,000 baht for family income (30.0%). 43.0% used less than 10,000 baht per month. The respondents were married (71.2%) and had 2 children (46.3%) as shown in Table 1.

As everyone has a right to use Universal Coverage Scheme, there were 203 respondents (47.2%) would use both Universal Coverage Scheme and private health insurance after retirement. 120 respondents (27.9%) were not sure to buy private health insurance after retirement; and 107 respondents (24.9%) would not buy private health insurance after retirement (Table 2).

To assess knowledge and attitude, the average score (mean) outcome were 19 and 57 respectively. From 30 questions of knowledge, they were divided following Benjamin Bloom's criteria, into three group: poor, moderate, and high [7]. Majority of respondents was in poor group, 221 (51.4%) people. The score of this group was 0 to 18 points. The most frequent score (mode) of moderate group was 18 with 2.90 of standard deviation.

The total score of attitude were 60 points. When using criteria of Bloom, we can divide attitude into 3 groups; low, medium, and high. Majority of respondents was in high group, 398 (92.6%) people. The score of this group was 2.34 to 3.00. The most frequent (mode) of high group was 3.00 as shown in Table 3.

From Table 4, the level of knowledge was significant at *p*-value <0.05 (*p*-value <0.001) with practice which most of poor group (50.7%) would use both Universal Coverage Scheme (UCS) and private health insurance. Moreover, moderate level of knowledge also used both type of health insurance (31.0%). The $\chi 2$ value was 23.26.

The level of attitude divided from score criteria showed two levels of medium and high attitude. The

Table 4 Relationships between knowledge, attitude, and practice/selection

Levels	Practice			$\chi 2$	*p*-value
	Use	Not sure	Not use		
Knowledge					
Poor	103(50.7%)	59(49.2%)	59(55.1%)	23.26	<0.001*
Moderate	63(31.0%)	58(48.3%)	31(29.0%)		
High	37(18.2%)	3(2.5%)	17(15.9%)		
Total	203(100%)	120(100%)	107(100%)		
Attitude					
Medium	1(1.0%)	19(15.8%)	11(10.3%)	25.80	<0.001*
High	201(99.0%)	101(84.2%)	96(89.7)		
Total	203(100%)	120(27.91%)	107(24.88%)		

relationship between attitude group and practice group was significant at *p*-value <0.05 (*p*-value <0.001); and the $\chi 2$ value was 25.80. This result found that the high attitude was associated with use Universal Coverage Scheme (UCS) and the will to buy private health insurance after retirement was (94.1%) from total 203 respondents (100%).

DISCUSSION

Socio-demographic

The respondents who participated in this study mostly were female (61.2%), parallel to the result of the survey of public opinion and health provider about universal coverage scheme in 2011 and 2013 National Health Security Office collaborated with Happiness Community Center, Assumption University that mostly were female participants 52.2% and 51.6% respectively [8, 9]. Additionally, this result is also similar to Chuthong's study [10] that showed female participants 59.5% female participants. 99.3% of respondents were Buddhist which is similar to the study "Factors affecting to health service utilization of people having universal health coverage right"; it showed that 95.7% of participants were Buddhist [11]. For educational level, 71.4% of respondents finished primary school. The result from National Statistic Office of Thailand shown 65-70% had an elementary school or below [12]. The finding was associated with National Health Security Office; it defined the education level in elementary school in 46.0% from year 2011 [9]. Mainly, the occupation of respondents were employee (36.7%) same as National Statistic Office of Thailand described that 62-63% were employee in 2007 and 2012 [12]. Furthermore, Chisapath mentioned 31.1% were employee [10]. Chiefly, respondents' personal income were less than 15,000 baht (54.0%) which Deevit [13] mentioned were 62.0%. For the result of marital status, the study showed about 71.2% of the respondents were married, in association with the survey from National Health Security office collaborated with Happiness Community Center, Assumption University which shown the number of married status in year 2011 and 2013 in 69.8% and 66.7% respectively [8, 9]. Lastly, number of children in family in this study showed 46.3% with 2 children. The result was similar to Chamchon's study [14] with 52.0%

Knowledge, attitude, and practice/selection

Comparing of knowledge and practice showed an association at *P*-value less than 0.05. The majority of respondent were in poor level group of knowledge (51.4%) in term of general information, benefit, and exclusion of both universal coverage scheme and private health insurance. There was a study of Emil [15] stated that only one-third of all respondents demonstrated accurate knowledge of the basic of their own health care system. For example less than 60% of respondents correctly answered the question about patient protection Act. Similar to this study, there was 60% of respondents answered question "According to section 41, if health care provider perform malpractice, patient or beneficiaries can receive reimbursement" correctly. Pokrel [16] stated that health information or knowledge during past 1 year, 70.9% received health information. On the other hand, study of Chuthong [10] revealed that 45.5% of participants were in moderate level of knowledge regarding access to universal coverage scheme. Additionally, there was a study from Iran stated that literacy level was not significantly associated with practice. This result showed respondents did not receive sufficient in order to bring awareness about positive impact of good practice [16].

Comparing attitude and practice, there was a strong association. Most of respondents receive high level of attitude. In line with Emil [15], most of respondent were consistently stronger supporters of

a right to health care access and universal health care. The study in Chiang Rai also revealed the same result. Most of the respondents had high attitude and perception toward universal health coverage, on the other hand attitude toward private health insurance, "Health care utilization and attitudes toward health insurance. A comparison of privately insured and medical assistance or uninsured patients" showed that Patients enrolled in a medical assistance program were less willing to pay for their health care than private patients. Sixty-two percent of clinic patients responded that they would not be willing to pay anything at all for their health care coverage. These data suggested that clinic patients did not prioritize health care and health insurance [17]. Furthermore, there were more than twice as likely to feel they were healthy; and they did not need health insurance (18.9 % versus about 9 % for persons with private or public health insurance). In addition, about one-third of adults without health insurance felt that it was not worth the cost compared with approximately one-quarter of persons with private or public health insurance. Among adults with health insurance, the percentages who agreed with the attitudinal statements toward health insurance were not significantly different for those with private versus public coverage [18].

CONCLUSION

Poor level of knowledge and high level of attitude had an association with practice and the will to buy private health insurance after retirement. However, due to insufficient information, there were still some respondents who were not sure to use or to not use private health insurance after retirement.

RECOMMENDATIONS

The world health report 2010 [19] mentioned the definition of health financing for universal coverage: "Financing systems need to be specifically designed to: provide all people with access to needed health services (including prevention, promotion, treatment and rehabilitation) of sufficient quality to be effective; and to ensure that the use of these services does not expose the user to financial hardship". This research was only to study about knowledge and attitude in relation to selection of health insurance type. The level of knowledge was in poor level regarding to lack of common understanding of the benefit or package of Universal Coverage Scheme. Nearly half of the respondents were willing to buy private health insurance after retirement. Moreover, there were group of people who could not decide resulting from lack of information about Universal Coverage Scheme. Therefore, the result showed that Thai government could not accomplish all goals of Universal Coverage Scheme. The best solution, government should perform more PR campaign to persuade people by providing information about Universal Coverage Scheme; so that people can know their right and use their right as much as possible.

Nearly half of the respondents would buy private health insurance after retirement; this is similar to a research about the persuasive communication by health insurance agents [20]. The communication process between life insurance agents and the insureds begins with an open-up step. The agents approach the customers through their good relationship. Later on the life insurance agents propose the life insurance policy to the insureds. This is called the selling step. The final step is the case-closing when the agents make/influence the insureds to buy the life insurance policy. The content of the message which life insurance agents use can be divided into the 6 types according to the objectives for buying the life insurance policy: general education, business protection, disability, debt, investment and medical cares. The persuasive strategies of life insurance agents that makes the insureds buy life insurance policy is the compliance-gaining strategies. They are in concordance with the persuasive strategies which the insureds believe that the life insurance agents use (the seven persuasive strategies from all sixteen strategies): expertise (negative), aversive stimulation, debt, moral appeal, self-feeling (positive), altercasting (positive) and altercasting (negative). The insureds perceive that the purchase of a life insurance policy would give good benefit for themselves and their families. When something bad happen, life insurance policy becomes something valuable; and this creates the positive attitude of the insureds toward the life insurance policy.

Further research should include health status or health condition as an independent variable. Health status can related with socio-demographic data; and it can impact the practice or dependent variable. High rates of chronic health conditions increase the elderly high risk in terms of catastrophic health expenditure. Likewise, the price of long-term care and healthcare services for the elderly are expensive. While being uninsured at any age is risky, older

persons without adequate health coverage are at particular risk of suffering adverse health events from skipping needed care, spending large shares of their income on out-of-pocket costs, and accumulating medical debt. Therefore, the future research will know whether health status has an association with the selection of health insurance type.

LIMITATION

This research was conducted in one area of Ratchaburi province. It cannot be generalized to a whole Thai population. Consequently, this study should be conducted for whole country population.

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