

## SOCIAL MEDIA: LINE APPLICATION AND ELDERLY HEALTH CARE<sup>1</sup>

**Piromlak Meesattayanan MS.N, R.N.**

**Ratchnee Choonkor MS.N, R.N.**

**Kanyanat Kerdchuen MS.N, R.N.**

**Wipawee Ponkaew MS.N, R.N.**

**Boromarajonani College of Nursing, Nakhon Ratchasima**

### **Abstract**

The aimed of this descriptive study was to explore the frequency of using a Line application for searching health care practice of the elderly living in Nakhonratchasima province. The sample size was 165 samples who aged over 60 years old. An accidental random sampling technique was used to recruit elderly samples, 30 men and 135 women, who are living in the area of city district of Nakhonratchasima province. The survey questionnaire was applied from Jantima Kheokao (2017) named the use of online media and knowledge of online health information media of Thai elderly questionnaire. Data was collected in March 2017. Descriptive statistics was used for data analysis.

The results showed that the 61 samples (36.97 %) of the total samples used Line application for searching health care practice. The frequency of using Line application per week found that 31 samples (50.82%) of those who used Line application for searching health care practice reported using Line application for 1-2 day and only 3 of those samples (4.92 %) used Line application for 3-4 day. There were 27 samples (44.26 %) used Line application for health care practice every day. There was 22 of those samples (36.06 %) spent their time with Line application for 1-2 hour a day. A few of those, 2 samples (3.28 %), used Line application for 7-8 hour a day. Only 2 of those samples (3.28 %) spent their time with Line application for 9-10 hour a day. The highest health-seeking behavior from Line application was searching for drug use and looking for the organization which was founded by the patients or was founded by the patients who have had the diseases. A healthy lifestyle was found to be the least one. In short, searching for health care practice resources though Line application can be used to improve the quality of life of the elderly. However, all those health information need to be proved by health care experts before apply.

**Keywords:** social media, Line application, elderly health care

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## Introduction

In 2016, Thailand has a total population of 65.72 million people with the proportion of 16.90 percent of the elderly (Information according to the announcement of the Ministry of Interior as of 25 February, 2016). The change in the Thai population structure when ranking the proportion of elderly people in Asia found that Thailand has the 3rd largest number of people after Japan and South Korea. There are many reasons to support this evidence such as the birth rate decreased, the deaths decreased, the form of the disease changes from infectious diseases to non-infectious diseases, and many health problems from accidents and disasters including occupational and environmental diseases. Health manpower management is still unable to meet the efficiency of the health service system. Information system and health research are also still unable to sufficiently utilize to fit with the health benefits for Thai people meanwhile health literacy of the Thai people is not enough to prevent various health risk factors as well. As a result, the adherence to the people as the center of development is one of the important principles of the National Health Development Plan No. 12 (2017-2021). There are measures and guidelines for development under the restructuring Thailand to Thailand 4.0 so that Thai people have good health such as strengthen network partners and health partners by linking Thai and international health systems, create health knowledge for health behavior modification, and strengthen the mechanisms and processes in data management by developing digital technology in health.

There will be many health problems when people get older. Some elders will have health problems that continue from adulthood but some others have health problems caused by aging. It was found that the Thai elderly had the following illness or health problems: hypertension (41 percent), diabetes (18 percent), knee osteoarthritis (9 percent), disabled (6 percent), depression (1 percent), and bedridden patients (1 percent) while only 5% of whom have been diagnosed by a doctor and found that there are no diseases or health problems (Elderly Health Group, Bureau of Health Promotion, Department of Health, Ministry of Public Health, 2013). Health care is, therefore, important to reduce the dependency of the elderly. The elderly who can take care of themselves will be the elderly with good quality of life. The elderly must seek knowledge in self-care from various media such as books, texts, television, and radio. Nowadays, technological advances are increasing. Mobile devices such as smartphone or tablet are affordable and easy to find from the stores. Application development of the smartphone or tablet for communication especially Line that can send proactive health information quickly and save money. Studies on the use of Line application of the elderly that have already begun to study, such as Wisapat Chaichuay (2017), studied the use of Line application in the elderly using phenomenological studies showed that 1) the elderly learns how to use the Line application by themselves and from the advice of friends or grandchildren, 2) the Line application creates a virtual space that allows the elderly to interact with friends or relatives without time and location restrictions, 3) the Line application becomes a part of the daily life of the elderly, 4) the elderly shows concern for others and signify that they are comfortable through pictures. "Good morning", and 5) the elderly evaluates that the Line application has more advantages than disadvantages. A study of Wannapohn Intamusik (2016) to explore the behaviors and the results from using the Line application for life and mind of the elderly group, Ban Pan Rak Association, reported that the

elderly used the Line application on a daily basis in average 1 - 4 hours per day. Those elderly reported that they received contents in various forms namely 1) animation/video, 2) graphic slide, 3) sticker, and 4) various information from the articles in various types of content such as 1) self- health care knowledge, 2) about Dharma, 3) how to in various ways, 4) greetings, 5) encouragement and inspiration quotes, 6) various alarm, 7) assumption, and 8) humor. Therefore, the aims of this study were to explore if the Line application is a good way to search for accurate health information of the elderly.

### Objective

1. To study the rate of using the Line application for searching healthcare practice of the elderly living in Nakhon Ratchasima province
2. To study the frequency of using the Line application for searching healthcare practice of the elderly living in Nakhon Ratchasima province

### Research Methodology

This study is descriptive research. The total population of the elderly in Mueang District Nakhon Ratchasima Province was 27,283 people. Using the Taro Yamane formula at 95% of confidence with the error of +/- at 10% for calculating the sample, the sample was 136.4 people and added 20% of dropout rare, therefore, the total numbers of the sample were 165 people. Sample characteristics of this study were 1) male and female aged 60 years old or over, 2) living in the area of Mueang District, Nakhon Ratchasima Province, and 3) be able to listen and speak the Thai language. The accidental random method was used for data collection in March 2017.

The questionnaire which was applied from Jantima Kheokao (2017) named “the use of online media and knowledge of online health information media of Thai elderly” was used for data collection. The reliability of this questionnaire was tested with 30 elderly who had characteristics as of those samples. The alpha coefficient of Cronbach reliability was at .81. Descriptive statistics was used to analyze data for frequency and percentage.

### Results

#### General information of samples

**Table 1.** Number and percentage of the elderly classified by gender and using Line application to search for healthcare information (N = 165)

Sample characteristics	Number	Percentage
Gender		
Male	30	18.18
Female	135	81.82
Using Line application to search for health information		
No	104	63.03
Yes	61	36.97

From Table 1, the general information of samples showed the number of female samples (135 persons or 81.82%) more than male samples (30 persons or 18.18%) and only 61 samples (36.97%) used Line application to search for healthcare information.

**Table 2.** Number and percentage of the elderly who used Line application to search for healthcare information classified by sample characteristics (N = 61)

Sample characteristics	Number	Percentage
Gender		
Male	14	22.95
Female	47	77.05
Age (years)		
> 70	1	1.64
66 - 70	22	36.07
60 - 65	38	62.29
Education level		
Primary school	5	8.19
Lower secondary school	3	4.92
High school	3	4.92
Vocational certificate	3	4.92
Bachelor	33	54.10
Higher than bachelor's degree	14	22.95
Marital status		
Single	8	13.11
Couple	42	68.85
Widow	8	13.11
Divorced / Separated	3	4.92
Current housing conditions		
Alone	6	9.84
Live with family of their children	44	72.13
Other (child / mother)	11	18.03
Monthly income (baht / month)		
> 30,000	29	47.54
20,001 - 30,000	12	19.67
10,001 - 20,000	3	4.92
< 10,000	17	27.87
Sources of income		
Receive pension	38	62.29
Support from children	11	18.03
Trading / private business	6	9.84
Employee / Permanent employee	3	4.92
Other (as a consultant)	3	4.92
Source of caregiver		
No care giver	14	22.95
Family of descendants	30	49.18
Others (son, husband)	17	27.87

Table 2. (contd.)

Sample characteristics	Number	Percentage
Chronic diseases that require regular medical treatment		
Gout	1	1.64
Thyroid tumors	1	1.64
High blood pressure	14	22.94
Heart and high blood fat	6	9.84
Diabetes and high blood cholesterol	6	9.84
No chronic diseases	33	54.10
Duration of using Line application (hour/day)		
< 1	12	19.67
1 - 2	22	36.06
3 - 4	17	27.87
5 - 6	6	9.84
7 - 8	2	3.28
9 - 10	2	3.28
Frequency of using Line application (day/week)		
1 - 2	31	50.82
3 - 4	3	4.92
Every day	27	44.26

From Table 2, the results show that most of the samples were female (77.05%), aged 60-65 years old (62.29%), educated in the bachelor's degree (54.10%), marital status in couple (68.85%), live with family of their children (72.13%), monthly income more than 30,000 baht/month (47.54%), source of income from pension (62.29%), sources of caregiver from family of descendants (49.18%), no chronic diseases that require regular medical treatment (54.10%), and most of them used Line application 1 - 2 hour/day (36.06%), and 1 - 2 day/week (50.82%).

**Table 3.** Frequency and percentage of samples using the Line application to search for contents of healthcare information (N = 61)

Contents of healthcare information which were searched	Often		Not often		Sometimes		Never	
	n	%	n	%	n	%	n	%
1. About germs	35	57.38	9	14.75	12	19.67	5	8.20
2. The form of a healthy lifestyle	35	57.38	5	8.20	11	18.03	10	16.39
3. The use of medicines	34	55.74	10	16.39	15	24.59	2	3.28
4. Treatment methods	34	55.74	6	9.84	14	22.95	7	11.47
5. Health care providers	35	57.38	9	14.75	13	21.31	4	6.56
6. Organizations founded by patients	39	63.93	13	21.31	7	11.47	2	3.28
7. Laws, regulations, and regulations related to health conditions	39	63.93	10	16.39	9	14.75	3	4.92
8. Groups of friend helping friend for health	37	60.66	11	18.03	10	16.39	3	4.92

From Table 3, the results presented that most of the samples used the Line application to search for the contents of healthcare information regarding organizations founded by patients (63.93%) and laws, regulations, and regulations related to health conditions (63.93%) while the use of medicines and treatment methods (55.74%) were the least healthcare information that was searched.

### Additional information from samples

1) A 71 years old male: *“I choose to read reliable healthcare information from health resources (branches and specialist). I will not read information shared in a line chain because it is not reliable. Using a Line application makes me feel not lonely and give me a chance to know new friends in the line group.”*

2) A 66 years old woman:

- *“I will choose to read from reliable sources and concise information. I used to follow some healthcare practice and get results such as finger manipulation to prevent locking fingers.”*

- *“I can't make the decision with that information because of conflicting information. I don't know who I should believe.”*

- *“using Line application help me meet my old friends and find new friends but it will keep my time to read information from other sources such as Newspaper drops.”*

3) A 67 years old woman: *“I like to read health section. I trust this information and use it to practice myself but sometimes it is not effective.”*

### Conclusions

1. The Line application is an appropriate social media tool for the elderly to make a connection with friends and looking for useful healthcare information for many reasons. The monthly income of these samples was from their pensions in which it can afford for buying

smartphone or tablet included the monthly internet service. In addition, the average age of these samples was about 65 years old which is in the early elderly group with no problems of eyesight, memory, and no chronic diseases, therefore, they have skills in using communication device better than the elderly in the middle and late senior age group. They can help themselves and society. Therefore, being elderly in the social media world making them able to communicate with friends online as well as searching for healthcare information. There are, however, some obstacles on using this application for elderly such as the language of Line application which was based on the English language and have some specific terminology that is difficult for the elderly to understand.

2. The study group had some chronic health problems such as high blood pressure, heart disease, diabetes, and high blood cholesterol. All such conditions need to use drugs to control the disease, therefore, searching for clubs or organizations or groups to educate and exchange methods of practice could be a good choice for elderly.

### Suggestions for further research

1. The study in the larger sample groups at the provincial, regional, and national levels should be conducted in order to get more information and the need for searching in various types of healthcare information from the Line application or other applications.

2. Qualitative study using in-depth interviews should be conducted to know analytical thinking in choosing data for healthcare as well as the forms of presentation of healthcare information via the Line application.

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