

# HEALTH INFORMATION BEHAVIOR OF ELDERLY IN DIGITAL AGE

<sup>1</sup>WIPADA CHAIWCHAN, <sup>2</sup>JARUMON NOOKHONG

<sup>1,2</sup>Faculty of Humanities and Social Sciences, Suan Sunandha Rajabhat University, Bangkok  
Thailand

Email: <sup>1</sup>wipada.ch@ssru.ac.th, <sup>2</sup>jarumon.no@ssru.ac.th

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**Abstract** - This research is survey research that aims to study the behavior of seeking and using health information of the elderly. The researcher collected data by using questionnaires and in-depth interviews. Population in the research were 40 elderly people living in Bang Kae elderly welfare development center. The sampling method used in the study was to determine the current status, information needs, and problems of using information for research purposes. The questionnaire was used to collect data and to analyze and summarize the data in 4 aspects: Personal data, Housing status, Health information behavior, Problems and barriers in using information. The research result found that most of elderly people in the Bangkok Elderly Social Welfare Center had health information seeking and using behaviors from the information source is a free video sharing website that lets people upload, view, and share videos (YouTube) at 37.5%. Health information seeking will be searched for information on the disease of the elderly (40%). The problems encountered in seeking and using information. Most of elderly people unknown where to seeking information and Internet usage is unknown. The content is often read elusive and they have physical problems such as vision that impede information perception

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**Index Terms** - Information Behavior, Information Seeking, Information Use, Health, Elderly

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## I. INTRODUCTION

In digital age, the rapid growth of the Digital Technology has significantly changed the landscape of information worldwide. And information accessing has change, users can access information on social media and mobile technology.[11] It's now easier than ever to create and share information in numerous formats. The health applications such as Health, iCare Health Monitor, Health & Fitness Magazine stand for the promise that in the near future individual well being and social progress in the knowledge society will be enhanced by the technology of the Internet provided all citizens have access and are ready to participate. [5][6] Therefore, the Internet has become an important and preferred source of health information. It functions as an important part of almost everyone's daily life including the elderly. The Internet is used as an effective communication and it assists the boost of social collaborations, provides more channels of learning and interacting among people in the field of education, business and make things more possible to create new forms of activities. [7][8]

Health information technologies in the field of geriatrics has been organized into five types: telecare, electronic health records, decision support systems, web-based packages for patients and family caregivers, and assistive information technologies. [9][15] Information is a valuable factor that mediates the relationship between social status and health, the

changing health information landscape could potentially help reduce social inequalities in health. However, there are many people who do not possess the skill needed to search for information on the web or the devices required to assess the web. [16]

The growth in medical technology has resulted in population structure. The increase in the number and proportion of the elderly population is continuing and rapidly. While the number and proportion of births less. As a result, the number and proportion of the elderly increased rapidly. The changes in population structure have an impact on the overall social and economic situation in the country. Although older people are responsible for maintaining their health. Elder have health problems more than others. Health problems of the elderly in addition to the change of deterioration. It can also be caused by inappropriate behavior. In addition, the elderly will have health problems. They also have a higher risk of damage to their quality of life.

Thailand have plans to provide support for the elderly at all levels from individuals, families, communities and societies, and to formulate strategies to ensure the well-being and quality of life of the elderly. And, the economic and social development plan (Digital Thailand) that have policies for need to use digital technology to care the elderly for the quality of life and well-being of the elderly should also be heard and learn new technologies that suit the age and try to adapt to be able to live the rest of the quality.

Therefore, eHealth Strategy, Ministry of Public Health (2016 – 2020) have policies to develop Health System for population in Thailand can access quality service through the use of effective and sustainable health resources. People can gain knowledge that recommendations for the disease, how to prevent and take care of their health to the correct practice. As a result, people are healthy.

Information behavior is the behavior of all human beings in relation to information resources, which encompasses behavior or activity. Information seeking behavior and information usage behavior, including communication with others, may be in the form of face-to-face communication and getting information from the media. [17] The need information about health seems to become more prevalent at an older age. The elderly are usually inquisitive and this prompts their search for information. They want to know more about their health condition, current happenings around them, technologies that could assist them etc. [1][2]

This study is therefore aimed at determining the information seeking behavior and to study the problems and difficulty in seeking and using information of the elderly with a view to improving their searching skills, identify the challenges they face while searching for information and proffer possible solutions to them. An analysis of information seeking behaviors of the elderly in health care. The study on such issues will provide useful information to public health agencies. The development of information services contributing to the health care of the elderly and the development of the elderly in the pursuit of effective self-information.

## II. LITERATURE REVIEW

### A. Information Behavior

Information behavior as the totality of human behavior in relation to sources and channels of information, including both active and passive information-seeking, and information use. [17] And to study for understanding of how people interact with information. The psychological theory states that information demand is caused by physical stimuli curiosity and social stimulus such as want to join and acceptance or impulse caused by the need to know or understand the in closed environment, which is a complicated need. [3][4] The information seeking is usually based on the principle of Zipf's Principle of least effort. Although, the information may be lower quality. This principle states that an information-seeking client will tend to use the most convenient search method, in the least exacting mode available. Including he described information seeking behavior as purposive seeking of information

as a consequence of a need to satisfy some goal. Information seeking behavior is the micro-level of behavior employed by the searcher in interacting with information systems of all kinds, be it between the seeker and the system, or the pure method of creating and following up on a search.

### B. Information Literacy

Information literacy is knowing when and why you need information, where to find it and how to evaluate, use and communicate it in an ethical manner. It is the adoption of appropriate information behavior to identify, through whatever channel or medium, information well fitted to information needs, leading to wise and ethical use of information in society. (Webber & Johnston, 2003) Information literacy has relevance for democracy and active citizenship and is something which happens or needs to happen outside of formal education and throughout an individual's lifetime as well as within educational institutions.

Information literacy provides life-long learning, a mechanism for people to develop their potential, and if any country has a lifelong learning. The human resources of that country are better than other countries. Information literacy is also a means of empowering individuals in the information society. So the information-seeking population is arguably the most valuable resource in the country today.

### C. Health Information

The Thai Health Service is currently in the process of expanding coverage of public health facilities in all provinces and providing universal coverage to the Thai people for reduce the disparity in access to essential public health services. Due to the lack of proper distribution of health personnel and medical technology, rapidly advancing medical technology has made patient care more effective. But at the same time, the burden of increasing costs is a challenge to increase competitiveness and reduce disparities in access to public health services. Driving the operation of the health service system is the need to use information and communication technology to manage and support operations of government.

The Ministry of Public Health in Thailand has developed the information system according to the master plan of information technology and communication that focus on the development of information technology and public health communication in accordance with eHealth guidelines of the World Health Organization (WHO) and the International Telecommunication Union (ITU) has been adopted by many countries as a framework for the implementation that will support organization to meet more health workload. The

WHO and the ITU has focused on public health. The information and communication technology (ICT) system is used to help people get healthy, fair, and safe health services. [18]

#### D. Elderly people

Elderly people are person who have age more than 60. Elderly people are aged between 60-69 years old, Older people are between 70-79 years old and Very old are between 80 years old. (National Elderly Act, 1997)

### III. RESEARCH METHODOLOGY

#### A. Materials and Procedures

This study concerns data collected from the sample used in the study were 40 elderly people living in Bang Kae elderly welfare development center. Because the population is small. The researchers used data collection methods from all populations by using questionnaire by interview method. The questionnaire was used to collect data and to analyze and summarize the data in 4 aspects: Personal data, Housing status, Health information behavior, Problems and obstacles in using information. Data Collection and Analysis, the researcher studied the documents and research related to information behavior include seeking and using health information behavior of the elderly.

The researcher conducted a self-study to study the current situation, information needs and problems of using the information of the elderly to be used in the research. Interviews and questionnaires were used to collect data. The data were analyzed and discussed by percentages.

### IV. RESEARCH RESULT

The study on the behavior of seeking and using the health information of the elderly. The results are as follows:

General information of the respondents found that the majority of respondents were female (60%) and male (40%). Most of the respondents lived in the Bang Kae elderly welfare development center for 1-4 months 4 elderly people (20%), 5-8 months 12 elderly people (30%), 9 months-1year 5 elderly people (12.5%), and more than 1 years 15 elderly people (37.5%).

**TABLE I: THE SOURCES OF INFORMATION THAT OLDER PEOPLE USE IN SEEKING INFORMATION**

Information source	Elderly people	Percentage (%)
What is the source of health information?		
Ask from person	14	35

Book/Magazine/Newspaper	5	12.5
Website	6	15
Youtube	15	37.5
Total	40	100

According to the survey, at present elderly 35% have information seeking and using behavior by ask from person, 12.5% seeking and using health information from Book/ Magazine/ Newspaper, 15% search health information on website, and most of elderly (37.5%) seeking and using health information by Youtube. Most active elderly use Youtube for 1-3 hours per day and use to view video clips and listen to music about Morals, Comedy, Health care that is convenient and fast.

**TABLE II: Health information using behavior of Elderly**

Information using	Elderly people	Percentage (%)
What purpose of use health information?		
Support decision-making in life	12	30
Learn how to take care of your health	6	15
Get information on government policies	3	7.5
Learn about the disease of the elderly	16	40
Understand the specific situation	3	7.5
Total	40	100

The results of the survey on information use of the elderly found that using health information for make decisions about lifestyle 12 elderly people (30%), Learn how to take care of your health 6 elderly people (15%), Get information on government policies and Understand the specific situation 3 elderly people (7.5%) and, most of elderly using health information for learn about the disease of the elderly 16 elderly people (40%).

The results about problems and barriers of the elderly in using health information are as follows:

**Table III: Problems and Barriers of the elderly in using health information**

Problems and Barriers in using information	Elderly people	Percentage (%)
What are problems and barriers in using information?		
Information source		
1) Unknown where to seeking Information	29	72.5
2) Information sources are difficult to access	11	27.5

Total	40	100
Information access (Internet)		
1) Internet usage is unknown	32	80
2) Do not have device for access	8	20
Total	40	100
Content of information		
1) The content is often read elusive	35	87.5
2) The content of the required information is insufficient	5	12.5
Total	40	100
Users		
1) Amnesia / understanding problem	18	45
2) Physical problems such as vision that impede information perception	22	55
Total	40	100

Information on problems and barriers in using information of respondents in 4 aspects found that 1) Information sources. Most of the respondents unknown where to seeking information were 72.58% (Mean = 3.53, S.D.= 0.82). The Internet usage is unknown 80% (Mean = 3.28, S.D.=0.89). The content is often read elusive were 87.5% (Mean = 3.14, S.D.= 1.06) and elderly people amnesia / understanding problems were 45% (Mean = 3.11, S.D.=0.833).

## CONCLUSIONS

The study about behavior of seeking and using health information of the elderly in digital age was studied and major conclusions are as follows:

1. The seeking and using of health information of the majority of the elderly living at the Bang Kae elderly welfare development center will receive information from the person through verbal communication or information search on YouTube to seeking and learn information about symptoms or problems of various diseases and factors in maintaining the health of the elderly include eating or risk of disease in the elderly.[10] The problem or condition encountered in seeking information is that the data may not be found as required or accurate. The search may not meet the objectives and does not match the disease data of the elderly and the health care needs. Most elderly people lack information literacy and search techniques, so they may get insufficient information or spend time searching for information or may be required to use information from many sources. They have more limitation on the use of the Internet more than other age groups, have

lesser chance to access to the Internet and IT technology is continuously developed and swiftly changed, it was very challenge to narrow down these gaps and solve these problems for Thai elderly in the future.

2. The usage of online information resources daily events among respondents from target group progressively increases, in some aspects electronic information sources are more used and/or preferred than traditional media. Information literacy skills correlate with the acquired level of computer handling skills. [12] Despite theoretical knowledge of literate Therefore, the study of health information seeking behaviors of the elderly reflects the importance of health information on the elderly and the needs of the elderly on the promotion of technology literacy. The development of the elderly to enter the society of learning and lifelong learning.

The major impact is the development of knowledge and skills in seeking information for the elderly, as well as the transformation of the country into a modern society to bring about self-directed learning in the form of life-long learning and can access to information, information evaluation and using information to help and promote good health according to their age range effectively. [13][14]

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