

Development of the Service Model for Elderly Quality Service of Primary Care Unit in Bangkok, Thailand

Kesarin WIMONTHADA¹, Praopitcha THALERNGPOL², Peerapong WORAPHATTHIRAKUL³, Namfonh CHITTAPHONE⁴ and Mongkhoun VATTHANA⁵

Western University, Thailand

¹Correspondence:

Kesarin WIMONTHADA,
Western University, Thailand,
E-mail:
nok1243@hotmail.com
^{2,3}Western University, Thailand

^{3,4,5}Faculty of Economic and
Tourism, Souphanouvong
University

Article Info:

Submitted: Oct 02, 2021

Revised: Nov 21, 2021

Accepted: Dec 07, 2021

Abstract

The purposes of this research paper were: 1) to study the development of the service model for elderly quality service for private primary care unit in Bangkok: 2) to study the factors affecting the development of the service model for elderly quality service for private primary care unit in Bangkok: and 3) to suggest the development of the service model for elderly quality service for private primary care unit in Bangkok. It was qualitative research using in-depth interviews. The key informants consisted of 25 people from the government sector, private primary care unit, and elderly to obtain information according to research objectives, focus on fact-finding, and bring in a systematic, rational, and theoretical conclusion and based on theory.

The results showed that development of the service model for elderly quality service for private primary care unit in Bangkok by creating health insurance through participation mechanism, building knowledge and understanding of rights and duties, along with providing a convenient and comprehensive service system with a focus on the sustainability of the health insurance system. The finding is based on structural changes in population, politics, economy, technology, natural resources and environment, and epidemiology of diseases that may affect the quality of life of people in society on long-term investment in the public health system. It was suggested this research of the budgetary management focused on efficiency, effectiveness and value need to focus and drive health policy for creating equality in society.

Keywords: *Development of the Service Model, Elderly, Private Primary Care Unit of Thailand.*

1. Introduction

Currently, Bangkok of Thailand has approximately 950,000 elderly people, or about 17% of the total population, and is projected to increase steadily into an aging society in the near future in some districts in Bangkok (National Statistical Office, 2011, p.7). For example, in Saimai district, the elderly

population is more than 20% of the total population in the area; a society with a population of 60 years and over that actually lives in the area per population of all age groups in the same area (National Elderly Promotion and Coordination Committee, 2002); at a rate equal to or more than 10% or more, or with a population of 65 years of age and over who

actually resides in the area per population of all age groups in the same area at a rate equal to or more than 7%, especially in Bangkok, there is the highest number of elderly people due to family migration to work and bringing the elderly with them, whether they are brought up with a concern that there will be no carer or take care of their children. But from the context of the elderly living in the provinces who know and greet each other, which is different from Bangkok who does not know anyone, even if the houses next to each other are not known; that is consistent with the research of Paphatsorn Woraphatthirakul (2019) who research on “Social influences that affect the policy of preparing the community into the elderly society in the northeastern region” found that factors of social influence the elderly desire to participate in physical activity, where society in the high-walled village is tightly guarded, causing stress. In fact, the elderly has always been the pillar of the family, earning money to support their families, but when they get older, they cannot work, so they feel that they are a burden on their families. In terms of society, most elderly people do not have income, which is a burden to families, society, and the nation, including health, finance, brain cell degeneration, lack of caregivers, making the elderly prone to depression; that consistent with the research of Maradee Siriphat (2018) who research on “Policy of preparing the community for the elderly society in the northeast” found that social factors and marketing factors influence the elderly desire to participate, if you are not aware of the problems of the elderly and care for the elderly will be a huge problem for the country.

Private Primary Care Unit has been established since 2002, starting from the Universal Health Insurance Policy that aimed to give all people in Thailand in the right to receive medical treatment equally; originally, people who had the right to receive medical treatment had only government and family member cards and social security rights; apart

from having to pay medical expenses themselves or submit a request to the Department of Public Welfare as being poor; that consistent with research of Sanchai Huangkit (2018) who research on “Administration of the National Health Security System for access to the elderly society in the Region 13, Bangkok” found that administration by creating health security for the Thai people through participation mechanism, building knowledge and understanding of rights and responsibilities of both the public and health personnel, coupled with the enhancement of a system serving the public (Napaporn Havanon and Teerawan Wathanotai, 2009, p.10-11; Pranom Othaganont, 2011, p.11-24). The health situation of the elderly in Thailand found that elderly people with chronic diseases such as diabetes, blood pressure, kidney failure, can lead to disability and death among the elderly, a condition that impairs health (Foundation of Thai Gerontology Research and Development Institute, 2012, p.25). The happiness that comes from having a good quality of life in 3 elements - good health, both physically and mentally, and social - is what older people need most at the end of their life (Ludda Dumrikarnlerd, 2012, p.14-15) by having good health, it raises from the individual activities (Pender, 1996, p.98) and besides the elderly taking care of their health, they can also receive care from others, known as social support, which has a positive rather than negative result to the health and well-being of individuals (Cohen and Syme, 1985, p. 3-4). Family is key institution to serve the needs physically, emotionally, and socially of the elderly (Department of Medical Services, 2014, p.58-59). At present, Thailand is in the process of transitioning to a fully aged society; children and the elderly will outnumber the working population, in addition, the child population is less than the elderly, this situation is a result of the rapid decline in fertility and the continued decline in mortality levels, being in good health is having a healthy body, a clear mind, fulfilling roles and relationships with

family and others (Orem, 1991 p. 51-52; Orem, 2001, p.74; Pender, 2011, p. 22).

From the above, it is an issue that made the researcher interested in studying “development of the service model for elderly quality service for private primary care unit in Bangkok, Thailand”; to study as a person who has a primary mission in providing care for the elderly in Bangkok. It is a study of issues related to support and encourages research organizations to process and develop knowledge on the elderly for policy formulation and the development of services or actions that benefit the elderly. Supporting and promoting research on the elderly, especially useful for policy formulation, service development, and promoting the elderly to live in society appropriately. In addition, the budget should be supported for the elderly together with the potential and volunteer to participate in the care of other elderly in order to provide access to government services, the implementation of the monitoring and evaluation of the performance of private primary care unit in providing care for the elderly in Bangkok.

The research has defined the research objectives as follow:

1. To study the development of the service model for elderly quality service for private primary care units in Bangkok.

2. To study the factors affecting the development of the service model for elderly quality service for private primary care units in Bangkok.

3. To suggest the development of the service model for elderly quality service for private primary care units in Bangkok.

2. Material and Methods

This research is qualitative research by studying documents and interviewing according to the following steps.

1. Studying information from primary documents is a review of related concepts, theories, and literature which has been studied from academic papers, research works, various articles both within the country and abroad,

including academic information obtained from an electronic search or various web media in order to provide the researcher with the required information and make new information as comprehensive and true as possible.

2. Sample group: to collect in-depth interviews and participatory observation. The key informant consisted of 25 people that divided into three groups as follow: (group 1) the 18 people from the government sector included the Permanent Secretary of the Ministry of Public Health or representative of the Deputy Permanent Secretary of the Ministry of Public Health, Director who has the duty to look after the elderly, Director of Health Security Office is 13 and related personnel: (group 2) the 3 people from primary care unit in Bangkok included executive personnel, doctor of primary care unit, primary service manager (nurse/public health officer) who passed training for primary care unit manager: and (group 3) the 4 people from elderly.

3. The instrument is an interview, which uses an in-depth interview with the key informants by using structured interviews on issues relating to the development of the service model for elderly quality service for private primary care unit in Bangkok, what factors affect the development of the service model for elderly quality service for private primary care unit in Bangkok? and what are some suggestions for the development of the service model for elderly quality service for private primary care unit in Bangkok? It is an open-ended question that provides insights into the research objectives.

4. Data analysis: 1) the data are obtained from transcripts and notes to review and consider the overall understanding of the key points of the data, 2) grouping of information and linking ideas in a relationship or rationality of the information provided, 3) the researcher writes in detail of findings and provides examples of important speech in the narrative for clarity of this phenomenon, and 4) discussing the findings by reviewing the

literature contains references to the research results, respectively.

3. Results

The researcher concluded from the research results are based on interviews and collecting data, which are detailed below.

1. To study the development of the service model for elderly quality service for private primary care unit in Bangkok as follow:

1.1 Government sector had the common opinion in the availability and adequacy of resources, personnel, budget, materials, and findings from a lack of visibility and public relations to service recipients along with equality which has disadvantage factors in the availability and adequacy of resources, personnel, budget, and materials. According to the findings, there are no factors to encourage the elderly to participate with the Health Security Office, which must support and promote the dissemination of information to the service recipients to cover all areas. As a result of the research, the government sector has improved public relations and dissemination of information that can be widely accessible to clients, especially the elderly, to be aware of their rights and duties, especially medical treatment. A single ID card is able to verify the rights and use of medical treatment, especially those with government rights can receive treatment using their ID card without having to reserve the money and then go to withdraw from the agency as before, but the service facility or hospital can set up medical expense reimbursement from the Comptroller General's Department. This is to solve the problem of the elderly who have children who are civil servants, children living far away, inconvenient, reimburse parents for medical expenses, which is a very direct solution.

1.2 Private sector had the opinion that the elderly were satisfied with the goals and objectives of the policy, the availability and adequacy of the resources, the knowledge and understanding of the practitioners, and assignments with results in the elderly network

to cooperate very well.

1.3 Public sector had the opinion that the elderly were satisfied with the goals and objectives of the policy, the readiness, and adequacy of the knowledge and understanding resources of the operators, assigning missions and assignments. Based on the findings, a plan that is aligned with the guideline specifies the goals for effective action, thus enabling comprehensive care of the elderly, the readiness and adequacy of the knowledge and understanding resources of the operators, assigning missions and assignments that affect the management effectiveness into the elderly society of the National Health Security Office (NHSO) Region 13, Bangkok.

2. To study the factors affecting the development of the service model for elderly quality service for private primary care unit in Bangkok as follow:

2.1 Government sector had common opinion resulting from:

2.1.1 Personnel: based on interviews, the number of personnel responsible for the elderly projects and activities is insufficient because Bangkok has a large area, which may prevent the p from being able to take care of the elderly in all villages due to limited personnel.

2.1.2 Budget: the budget for the preparation of the elders of the National Health Security Office (NHSO), Region 13, Bangkok is not sufficient to undertake projects with the elderly, moreover, together with the number of elderly people.

2.1.3 Materials and equipment: there are a lack of readiness and sufficiency of resources to support the organization of the elderly program, for example, the existing budget is not enough, the personnel are also insufficient, at present there are personnel responsible for projects and materials, there is also a shortage of materials and equipment to support activities for the elderly due to budgetary constraints on the purchase of adequate equipment.

2.1.4 Practitioners' knowledge and understanding: practitioners have good

knowledge and understanding of working procedures and processes for implementing public service policies for the elderly and have knowledge and understanding of policy objectives at the NHSO Region 13, Bangkok, well assigned because they have experience in their duties for more than 5 years and have regularly trained and developed their skills.

2.1.5 Mission assignments: from document data processing, with assignments for the care of the elderly project at the NHSO, Region 13, Bangkok, taking care of the overall, but the person responsible for the implementation of the project has been identified and is coordinated with various internal and external departments.

2.2 Private sector had common opinion resulting from:

2.2.1 The personnel of the NHSO, Region 13, Bangkok, who are responsible for managing individual elderly care, have a collaboration to make the implementation of the elderly effective, satisfaction, equality and good punctuality as well as sufficient human resources. This can be observed from the absence of the elderly complaining about the service behavior of the personnel.

2.2.2 The budget used for the preparation of the project for the elderly of the NHSO, Region 13, Bangkok, is ready for some projects and some projects are not sufficient, especially the elderly living allowance scheme because in the future the number of elderly people may increase further, according to the latest population survey data.

2.2.3 Materials and equipment of the NHSO, Region 13, Bangkok have a sufficient budget for purchasing materials and equipment for the elderly.

2.2.4 The knowledge and understanding of practitioners in the NHSO, Region 13, Bangkok in the formulation of public administration plans have clearly defined missions and assignments to the responsible departments and have determined the goals of various programs that are in line with the

elderly care plan, which is working together in a cooperative way, and encourage agencies to have a clear operational role.

2.2.5 The assignment of work of overseeing the elderly program that consists of the Office of the Permanent Secretary and the Finance Division, oversees the overall project and identifies the person responsible for implementing the elderly program as a coordinator that will affect the management effectiveness of the NHSO, Region 13, Bangkok.

2.3 Public sector had common opinion resulting from:

2.3.1 Personnel of the NHSO, Region 13, Bangkok has been collaborating with various departments to effectively quite disciplined, responsible service and coordinate cooperation between organizations with unity.

2.3.2 Budget for the elderly project management services and activities to achieve goals and benefit service recipients, the researcher sees that, unlike other places that aim to develop infrastructure as the main goal in allocating material and equipment budgets.

2.3.3 There are adequate materials and equipment to provide service to the elderly because the executives have realized the importance of the value of approved budgets for the elderly, if that is not enough, the executives also give additional budget as appropriate.

3. To suggest the development of the service model for elderly quality service for private primary care unit in Bangkok as follow:

3.1 The administration of the National Health Insurance Fund under budgetary constraints, management that emphasizes efficiency and value, uses empirical data to develop mechanisms, management methods, and policy decisions, including monitoring and evaluation, and finding alternative sources of funds into public health insurance system is important in driving the next phase of the long-term sustainability.

3.2 Creating cooperation with all sectors in joint development, management, and

ownership of the health insurance system together to create the participation of all sectors in co-thinking, co-operation, and responsibility.

3.3 Protection of access to services for specific target groups who are not yet able to access necessary services, such as vulnerable groups or others who have not yet reached essential services, such as urban middle class, disadvantaged groups such as elderly, inmates, homeless, etc.

3.4 The use of Thai traditional wisdom and medicine in conjunction with modern medicine, which is achievable in some areas, is still a key issue that needs to be focused on and policy-driven to further expand the results.

3.5 Strengthening of health promotion, disease prevention, and education to increase people's self-care awareness to reduce illness from preventable diseases.

3.6 Differences in the national health insurance system affect the access to health services of equal quality standards among people with different rights, the government policy, the national strategic framework for the period of 20 years, the 12th National Economic and Social Development Plan (2017-2021), as well as the draft Constitution of the Kingdom of Thailand which are pending to be announced, set a framework, goals, and intentions to create equality in society. Therefore, integrating the public health insurance system is a key policy to be driven by relevant strategic partners, which poses the challenges of the public health insurance system in driving towards the set goals.

3.7 It is forecast that Thailand will enter a fully aging society by 2025, where the proportion of the elderly will increase to 20% of the population (complete aged society). Agencies and all relevant sectors must have policies and preparation, management, and service systems, including budgets, to meet the health needs of this group, preventing disease in the elderly is the first priority over treatment.

3.8 Audits from external agencies such as the State Audit Office of the Kingdom of

Thailand (SAO) and various auditing units require the office to strengthen the internal audit mechanism and the governance mechanism in various forms, including review of rules/regulations/announcements / orders to support the implementation of the intent of the National Health Security Act 2002. At the same time, it is consistent with other laws/regulations, etc. that are related to each other to maintain good governance in the management of the organization.

3.9 Investigate the working group to prevent private hospitals from the gold card scheme by increasing the conditions for resignation from the project and increasing the capacity of public hospitals to accommodate more patients.

4. Discussion

Issue 1. Development of the service model for elderly quality service for private primary care unit in Bangkok by studying the management of the National Health Security System when entering the elderly society in region 13, Bangkok, it is well known that since 2002, there have been a “30 baht treat all scheme”, it was a populist policy and it was the first point people access to government service. It would be difficult to repeal after the enactment of this Act, creating a new government agency, which called “the National Health Security Office (NHSO)”. This government sector is directly affiliated with the Ministry of Public Health since it is a private government agency established under the Health Insurance Act 2002 under the supervision of the Minister of Public Health as the chairman of the National Health Security Committee, under the principle “Share Suffering, Share Happiness” (an average risk of insurers in the system to provide them with equal access to services) by giving importance to the protection of the health rights of the people according to the constitution to oversee and supervise the administration of health care budget for the people as the government allocates money to government agencies and private sectors which consistent

with research of Paphatsorn Woraphatthirakul (2019) who research on “Motivation in personnel’s performance affecting to administration of National Health Security Office, Area Branch 13 (Bangkok)” found that participation in planning, participation in operations, participation in monitoring and participation in development has affected the role of the private primary care unit in providing social care services for the elderly in Bangkok in order to increase the potential to improve the quality of life of the elderly, the needs of the elderly are based solely on the standard of social welfare: consistent with research of Phimphisut Boukeaw and Ratiporn Teungfung (2016) who research on “Health care and health status of Thai aging” found that government sector should maintain policies related to the welfare of the elderly, especially the elderly allowance scheme and improve the channels of access rights to such a comprehensive and thorough as well as promoting behavioral health care of the elderly. Elderly health care was found that as the elderly had more health care behaviors, resulting in better health, and taking care of their own health was also part of the activities that individuals performed for their own health (Department of Health, 2005, p. 1), which consistent with research of Paphatsorn Woraphatthirakul (2019) who research on “Social influences that affect the policy of preparing the community into the elderly society in the northeastern region” found that planning, organization of personnel, process command, coordination and site arrangement affect the policy of preparing the community to enter the elderly society to take action to solve problems and meet the needs of the elderly group who want to be helped by coordinating with relevant agencies, whether public or private, which consistent with research of Daniel WW. (2010) found that the relationship to the social and economic position of the elderly was largely a result of reduced participation in social life from the socioeconomic status that was important to the

factor in determining social participation of the elderly in the development of the quality of life of the elderly, respectively.

Issue 2. Which factors affect the development of the service model for elderly quality service for private primary care units in Bangkok? The reason why Bangkok is different from other provinces: it has medical schools as well as private hospitals which have the potential to take care of many patients and there are also primary care clinics spread across Bangkok. Primary care clinic is a large medical facility that is close to the people, caring for people from birth until death, so it is an important part of giving people access to public care services, that consistent with the research of Sanchai Huangkit (2018) who research on “Administration of the National Health Security System for access to the elderly society in the Region 13, Bangkok” found that this was due to the factors of changing the population structure, aging society, decreasing household size, diversity and also having problems both in quantity and quality of the population of all ages. Moreover, the slowdown in the economy has limited economic expansion that could affect investment in public health over the long term and although the situation of poverty tends to decline, there is still inequality in income distribution and inequality among people which affect the quality of life of the people in society.

Issue 3. They suggest development of the service model for elderly quality service for private primary care unit in Bangkok: there are interesting issues that can be separated from the aging policy by creating health insurance for Thai people through a mechanism of participation in building knowledge and understanding of rights and duties of both the people and public health personnel, along with supporting the organization of the service system that people can access easily and thoroughly, that consistent with research of Nuchsaree Siriphat (2018) who research on “Implementing exercise policy for diabetic patients in the primary care unit of the National

Health Security Office, Bangkok” found that continuous development of performance models to provide people with access to services and receive public health services according to their rights as Thai citizens, the importance of the operation lies in cooperation from all sectors, including the public sector, local government organizations, professional councils, and most importantly, public health service providers. The research of Amitage, C. & Conner, M. (2001) who study of community-based physical activities for adults aged 50 years and over found that appropriateness of the socio-cultural context, community environment and policies for changing individual behavior results in the sustainable development of the elderly program that requires the development of health care systems and the provision of public access to quality and standardized services, that consistent with research of Wichan Choorat et al (2012) who research on “Factors Influencing the Risk of having Mental Health Problems of the Elderly” found that the elderly are a greater risk of health problems, physical and mental health, according to the changes of the aging process in order to provide system development and create mechanisms for evaluating efficiency and effectiveness, as well as cost-effectiveness and accountability in implementing the policy, including protecting the rights of all sectors to develop appropriate internal management of the NHSO with a much stronger focus towards the sustainability of the health care system even further.

New knowledge

New knowledge gained from this research; is the development of the service model for elderly quality service for private primary care unit in Bangkok, to create a comprehensive health care insurance for Thai people, through mechanisms contribute to creating a better understanding of both the rights and duties, along with supporting the organization of a service system that people can access easily and thoroughly. The focus on optimizing the administrative budget by the

involvement of stakeholders in all sectors including the rights of all parties appropriately to the development of the internal management of the NHSO with more focus on the direction towards the sustainability of the health insurance system. Factors for changing population structure, being an aging society, household size decline, diversity and still having problems in both quantity and quality of the population of all ages, there are constraints on economic expansion that may affect long-term investment in public health, and although poverty tends to decline, there is also inequality in income distribution and disparity among people which affects the quality of life of the people in society. In addition, changes in politics, technology, natural resources, and the environment, and the occurrence of epidemics affect future health systems.

5. Conclusion

Development of the service model for elderly quality service for private primary care unit in Bangkok: the missions, units, and positions of personnel are assigned to be performed in order to achieve flexibility, and the public service model is continuously developed and encourage stakeholders to manage the elderly of the NHSO, Region 13, Bangkok, in terms of budget, materials and equipment and selection of personnel with appropriate knowledge and capability with a positive attitude. Supporting training and development of personnel and continually monitoring the implementation results to build knowledge and understanding of the personnel responsible for the implementation in order to have clarity on goals and objectives along with increasing clarity in assignments, aiming to minimize the complexity of the services available to the elderly as much as possible by combining similar services, eliminating unnecessary steps and consolidating services at one point, the speed of responding to the needs of the elderly must be considered. For this reason, decision-making power should be more decentralized and the performance of lower-

level officials should be promoted and allowing the elderly or representatives to check the performance of the personnel, which may be done in the form of having an assessment from the elderly and increase the supportive budget for the elderly who come to care for the elderly together in order to encourage the elderly to develop morale and encouragement for sustainability.

6. Conflict of Interest

We certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

7. References

- Amitage, C. & Conner, M. (2001). Efficacy of the theory of planned behavior: A Meta analysis review. *British Journal of Social Psychology*, 40(4), p. 71-99.
- Cohen.S and Syme.S.L. (1985). Social support and health. San Francisco: Academic Press
- Daniel WW. (2010). Biostatistics: Basic Concepts and Methodology for the Health Sciences. Ninth edition. Asia: John Wiley & Sons, Inc: 192.
- Department of Medical Service Ministry of Public Health. (2014). Manual Screening and Assessment of Aging. Bangkok: The War Veterans of Thailand. (in Thai)
- Foundation of Thai Gerontology Research and Development Institute. (2010). Situation of The Thai Elderly 2009. Nonthaburi: SS Plus Media. (in Thai).
- Ludda Dumrikarnlerd. (2012). Aging care in community chapter 1 situation and demand of aging care in the community. Nakhon Pathom: ASEAN Institute for Health Development Mahidol University. (in Thai).
- Maradee Siriphat. (2018). Policy of preparing the community for the elderly society in the northeast. *Journal of Education*, 15(Special Edition), p.488-506. (in Thai).
- Napaporn Havanon and Teerawan Wathanotai. (2009). A new agenda for developing housing for elderly in Thai Society. Bangkok: Faculty of Architecture Rajamangala University Technology Thanyaburi. (in Thai).
- National Elderly Promotion and Coordination Committee. (2002). 2nd National Plan for the Elderly (2002-2021). Bangkok: Office of the Prime Minister (Thailand). (in Thai).
- National Statistical Office. (2011). Population census 2010. Bangkok: National Statistical Office. (in Thai).
- Nuchsaree Siriphat. (2018). Implementing exercise policy for diabetic patients in the primary care unit of the National Health Security Office, Bangkok. *Journal of Education*, 15(Special Edition), p.233-242. (in Thai).
- Orem, E.D. (1991). Nursing: Concept of practice 4th ed. St Louis: Mosby-Year book, Inc.
- Orem, E.D. (2001). Nursing: Concept of practice 5th ed. St Louis: Mosby-Year book, Inc.
- Paphatsorn Woraphatthirakul. (2019). Motivation in personnel's performance affecting to administration of National Health Security Office, Area Branch 13 (Bangkok). *Journal of MUC Nakhondhat*, 6(1), p.486-498. (in Thai).
- Paphatsorn Woraphatthirakul. (2019). Social influences that affect the policy of preparing the community into the elderly society in the northeastern region. *Journal of Suvarnabhumi Institute of Technology*, 5(1), p.432-445. (in Thai).
- Pender J Nola. (1996). Health promotion in nursing practice 3th ed. USA: Appleton and Lange.
- Pender. (2011). Health promotion in nursing practice 6th ed. New Jersey: Pearson Education Inc.
- Phimphisut Boukeaw and Ratiporn Teungfung. (2016). Health care and health status of Thai aging. *Journal of the Association of Researchers*, 21(2), p. 94-109. (in Thai).
- Sanchai Huangkit. (2018). Administration of the national health security system for access to the elderly society in the Region 13, Bangkok. *Journal of Education*, 15(Special Edition), p.214-232. (in Thai).
- Wichan Choorat.et al. (2012). Factors influencing the risk of having mental health problems of the elderly. *Thai Population Journal*, 3, p.87-109. (in Thai).