Development of Age-Friendly Primary Health Care: Case Study of One Primary Care Unit

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Abstract: This mutually collaborative action research aimed to develop age-friendly primary health care (AFPHC) for older people at one primary care unit (PCU), under the supervision of the university hospital, Khon Kaen province, Thailand. The participants were older people and their family members, nurses, the staff of the primary care unit, community health volunteers (CHVs), and community leaders. Data were collected by participatory observations, natural interviews, in-depth interviews, focus group discussions, and document reviews. Qualitative data were analyzed by content analysis. Quantitative data were analyzed by using frequencies and percentages.

The findings of six concepts of AFPHC: Respect, direct services, equity in elders group, good death, family care, and age-friendly environment, led to the process of developing age-friendly primary health care for the elders in four phases. These were: 1) awareness of AFPHC concepts, 2) changes in health service behaviors and age-friendly environments, 3) developing age-friendly services and activities, and 4) building age-friendly service networks. The results of this study suggested that age-friendly primary care comprised of three components: age-friendly behaviors, age-friendly services, and an age-friendly environment.

Factors contributing to the development of AFPHC were: 1) positive thinking of participants, 2) management for mutual benefits, 3) social capital of local stakeholders, and 4) input from gerontological advanced practice nurses in the community. Barriers to the development of AFPHC were: 1) the changed policies of the PCU administration, 2) the personnel outcome evaluation system that focused more on individual than groups or project based.

Thai J Nurs Res 2008; 12 (2) 131-141

KeyWords: age-friendly service, elder, primary health care

Introduction

The population of older people in Thailand has grown substantially. It is expected that the population of 60 years will rise to 16.8% by the year 2020. In addition, the proportion of older people with illnesses is growing, and they become sicker as they are getting older. As a result, older people need tertiary care service for their complex health problems.
But the national health care policies do not adequately deal with problems of the elders. Most hospitals discharge patients to their homes, while their family members cannot provide effective care because of socio-economic problems. Therefore, primary health care (PHC) that can support problems of the elders, cover each of duration of the elders’ health problems is the necessary health care service. In this study the term, “primary health care” introduced by WHO is comparable to the term, “primary care” in Thailand. Thus, this study will use the term PHC of WHO to refer to primary care in Thailand.

In 2004, the World Health Organization (WHO) recognized the critical role primary health care centers play in the health of older people worldwide, and drew attention to the need for these centers to be accessible and adapted to their needs. To develop PHC, the WHO recommends the use of AFPHC principles. To date, in Thailand, no studies have been conducted to support the idea that the integration of these principles will lead to AFPHC in practice. This study was carried out to identify AFPHC concepts for development of Thai AFPHC practices.

**Purpose of the study**

The objective of the study was to develop age-friendly primary health care at the primary care unit participating in this study.

**Framework of the study**

The theoretical concepts of AFPHC of WHO together with results from situational analysis of AFPHC services of the study site were used as conceptual framework of this mutual collaborative action research (Figure 1).

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**Figure 1** Framework of the study

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The situation of AFPHC services for older people at PCU participating in the study

- **Situation of older people’s health**
- **Health care services for older people**
  - Health service of PCU
  - Health service of others
  - Factors that effect health services

Concept of AFPHC (WHO)

- **Primary health care principles**
  (Availability, Accessibility, Comprehensiveness, Quality, Efficiency, Non-discrimination, Gender & Age responsiveness)
- **Age-friendly principles**
  - Information, education and training
  - Community-based health care management systems
  - Physical environment and accessibility

**Action Research** (mutual collaborative)

- The participation of participants
- Spiral action cycle (Reflect, Plan, Act & Evaluate, Re-plan)

Age-friendly primary health care at the primary care unit participating in the study
The Research Methodology

The research methodology was an action research, mutual collaborative approach type.

Setting

The setting of the study was a PCU in the urban community of Khon Kaen, which is under control of the university hospital. The health care providers were four nurses, three officers, 117 health care volunteers, and three physicians. However, the doctors provided health care service only three days per week and each took turns. This PCU covers 2,827 households or 12,874 persons, of whom the elders constituted 1,272 (9.88 %) of the population. Forty-eight (3.77%) of total older people had disabilities, 36 (2.83%) of them were immobilized, seven (0.55%) were visually disabled, five (0.39%) had hearing loss and communication disabilities, and one (0.08%) had psychological problems and learning disability.

Data collection

The data were collected by participatory observations, natural interviews, focus groups, in-depth interviews, and documents. The key people in each process were different. In the situational analysis of AFPHC at PCU participating in the study, the participants were eight staff members of PCU, 22 older persons, ten health care volunteers, two community committees, and four government and private officers. The key informants of the AFPHC development stage were eight staff members of PCU, 20 older people, 15 health care volunteers, and two community committees. At the evaluation stage, the participants were eight staff members of PCU, 24 older people, five health care volunteers, two community committees, and four family care givers. If the key people did not allow his/her interview to be recorded on audio-tape, the researcher recorded the interview by using field notes. Each participant was interviewed 2-3 times to ensure the accuracy of the information.

Establishing trustworthiness

The researchers selected the evaluation criteria based on the work of Guba & Lincoln (1981). The qualitative approach criteria were credibility, transferability, dependability, and conformability. Data triangulation was used for conformation of the data which was collected until saturated. This study was carried out from July, 2003 to October, 2006 (28 months).

Data analysis

The quantitative data were analyzed by descriptive statistics: Frequency and percentage. Qualitative data were analyzed by content analyses. The process of data analysis took place from the beginning of the observations and interviews. The first author shared the implicit categories contained in the questionnaire with the participants for clarification, and explained the patterns and illustrated the relationships of categories to each other.

Ethical Considerations

To address concerns in the ethics of human research and action research (freedom, equity, and participant protection), the research proposal was submitted for approval to the human research committees of Khon Kaen University, Thailand.

Results of the study

The results of this study are presented in four phases according to action research process: 1) Age-friendly primary health care situation: Before development, 2) developing age-friendly primary health care, 3) age-friendly primary health care: After development, and 4) factors related to age-friendly primary health care development.
Age-friendly primary health care situation: Before development

1. Health status of older people in the community

In the community, there were five elder health status groups: 1) the active group who had no disease and could look after themselves, 2) the chronic disease group, which needed continuous care, 3) the disability group, 4) the chronic disease and disability group; and 5) end-of-life group. Because these various problems depended on their health status, the elders were using health services much more than other age groups, 20.5% in year 2003 and 30.4% in year 2004. Most elders’ health problems were mobility problems, such as visual and/or hearing impairments, moving impairment or leg and joint pain, and chronic disease. Chronic disease was the most severe health problems that caused the elders to use health services. These were DM (28.69%), hypertension (23.18%), and leg and joint pain (13.93%).

Fifty percent of the elders had anxiety and uncertainty because of health problems, economic problems, no care giver, and being dependent on their families.

2. AFPHC from the perspective of the elders

For health and social problems, the elders in communities showed a need for age-friendly services in six concepts.

2.1 Respect Older people need health providers to accept them as though they are older relatives, not just clients. Health care patterns that are respectful to elders can be characterized as follows:

1) Thai cultural respectful manners
Health-care providers should pay respect to older people according to Thai culture, with the Wai (non-verbal gestures), when they come in for services. The elders prefer to be called by a kinship term, e.g., calling females “mae” (mother, mom) or “mae-yai” (grandma) and males “por” (father, dad) or “por-yai” (grandpa), etc.

2) Nonverbal expression The elders need providers to be enthusiastic about providing care.

I went there; they asked me why I came. I said I needed a wound dressing and they did a great job for me. It (the dressing) was not painful at all.

3) Actions of respect These include listening, believing, and being sensitive to what the elders say. One female elder explained:

Only (name…) believed me…she helped me when I was there. I told her I had a stomachache (so bad) that I couldn’t even sleep. I couldn’t eat and she gave me an injection. Others (providers) were not like that, they only gave me para (cetamol), I couldn’t take it. Even if I did, it wouldn’t work. (I) vomited.

4) Misery sensitive and understanding
Respect for older people needs to encompass an expression of understanding of their problems, and to not imply that their problems were a laughing matter or insignificant. For example, one woman was experiencing frequent falls. Providers greeted her as usual, without acknowledging her concern about her frequent falls:

Oh, you fall again? When I heard them greet me like this, I didn’t want to go again.

5) Recognition Older people need health providers to recognize them, and greet them every time they meet, both inside and outside the PCU.

You didn’t say hello to me the other day. Didn’t you see me? 
2.2 Direct services Because of mobility problems, visual and/or hearing impairments, leg and joint pain, staying at home alone or with just the spouse, the elders also need home health care.

I’m really glad that the provider visits me at home.

2.3 Equity Older people want to be accepted and to participate equally in society. Equity must extend to elder welfare socially as well as in the medical context. Every activity and project should include every elder, without discrimination, in order to decrease their family dependency. The elder said,

It is better that the government distributes money to all elders. Elders here are poor.

2.4 Family caring Elder health care should look after elders’ family members in order to promote the ability of the family, and to decrease anxiety. For example, one older female who takes care her disabled son alone said,

I am really concerned about my son. I fear. If I am sick or die, there will be no one look after him. I need someone to help me.

2.5 Good death At the end of life, elders want to leave this world peacefully, without prolonged suffering. They do not want to be a burden to their children. For example, one female elder lives with her grandchildren because her two daughters live in Bangkok. She has had hypertension for 10 years. She has tried to control her blood pressure, but it is still high (190-200/140 mmHg). She did not want to be in a coma and had to be her family members’ burden. She repeatedly spoke of this:

I pray, hands over my head, to the Buddha, the Dharma and the Sangha. If something happens, I pray I would not be left with a disability. I pray to the Buddha’s bone and my parents’ greatness and also to all my teachers. With all the merits I have done until now, please don’t let me be too sick and a burden to anyone (sobbing). If I am to die, just let me go. I don’t want any suffering.

2.6 Physical Environment PCUs all over Thailand have the same building plan from the Ministry of Public Health: A two-story building with steep steps. Older people need health care buildings suited to their functions, such as ground-level health care services of the PCU, the pavement must not be slippery, and provided with a rail to prevent falls.

I have to climb the stairs carefully, I fear falling down the stairs.

3. Age-friendly primary health care: before the development

The situational analysis of PCU revealed that the primary health care principle was the main principle that focus on equity. Before the development of AFPHC, the age-friendly primary health care of this PCU had these characteristics:

3.1 One standard care service for all ages This was evident for the elders, such as in-home visits and exercise. The home visit focused on sick people, and the activity was not designed for the elders.

3.2 Focusing more on disease than on the specific problems of the elders Even though primary treatment for older people was provided at both elders’ clinics and chronic care clinics, no specific problems of the elders were treated, such as falling, which was about 2.75% of their health problems.

3.3 Focusing more on indirect service than direct service Most of the service time was for clinical treatment while the service time for home visit was only 17%. Even though the clinical treatment provided was high quality, nurses and doctors had
tertiary care experience, there was no training in gerontological and geriatric care, and primary care.

3.4 One standard PCU building for all The structures of PCU building almost the same all over Thailand. The service area was on the second floor of the PCU building, thus causing discomfort as older people had mobility problems, especially joint pain.

Situational analysis based on age-friendly primary health care of the WHO, confirmed that elder services of this PCU tended to focus only on a primary health care principle but not an age-friendly principle. There was the need for age-friendly service development based on the six age-friendly concepts from the elders’ perspective together with primary health care concepts of accessibility, quality, efficiency, and holistic care.

Developing Age-friendly primary health care

The development of age-friendly primary health care was the process that promoted participation of the main stakeholders, such as PCU, the elders and their families, health volunteers, and the community committee. During the development process, the researcher participated in the process and activities, such as brainstorming, problem analysis, planning, monitoring, and evaluating the process and outcomes. The AFPHC services were gradually changed as follows:

Phase 1: Awareness of age-friendly concepts

The data were analyzed after mutual understanding, and good relationships had been established between the research team, the health care personnel and the elders in the area. The research team was formed in order to analyze the situation. Through sharing environment, the researcher, nurses and key elders became aware of age-friendly concepts. They learned the differences between older people and others of different ages. They also realized the capability and the value of elders. Then the nurses started to cooperate with the health volunteers in order to care for the elders at their houses, and began forming friendships with the elders. Moreover, the research team brought up the results of the situation study to the executive of the health center, the director of the nursing department, and the advisers who were physicians. These resulted in supports from administrators who were involved in the development, and the team leader, the responsible nurse of the elders’ projects.

Phase 2: Changes in health service behavior and an age-friendly environment Changes made during the study included: 1) the behaviors of providing health care service were changed, such as making a “Wai” (Thai greeting) to the older people who came to use the service, or when they met the elders in other places, 2) using kinship pronoun as they talked to their family, 3) moving the health clinic to the ground floor of the building, 4) making the toilet suitable for the elders, 5) expanding the existing health service to include the requirements of older people, such as drug delivery and OPD at home in order to help the chronically ill who could not come to the health center, and 6) improving the emergency and consultation call. Additionally, there were health care volunteers to take care of disable elders and providing check-up service for the elders in the community. Moreover, the nurse in charge of elder care also cooperated with the elders’ committees to improve health promotion programs for elders, such as exercise. Health care team and the elders supported each other in some activities, such as on Songkran Day (Elder’s day/Family’s day), where there is water blessing for the elders in the community.

Phase 3: Developing of age-friendly services and activities

After developing health services for a short time, the research team learned how to work together, how to solve problems, and gained experience together, and they had a good relationship with the health care providers of the PCU and the elders in the community. Each group of the research team started
to understand their part in developing the plan, solving the problem, changing the health service to be more specific for the elders at the clinic, at home, and in the community. For example, new services were designated: “Yellow card,” “Yellow service,” “Yellow corner,” and “Yellow follow-up,” including improving the environment at the health center to be an age-friendly environment, making external ramps with handrails and the warning signs.

Phase 4: Building networking of age-friendly services

When the participants understood the main purpose of AFPHC service, the concept of the elder health care service was quickly implemented. For example, numerous participants and cooperating branches modified the health center of the community for the process development and continuation, although the researcher had left the research area. Nurses, the geriatrician, physical therapists, and social workers, all cooperated together. Furthermore, the PCU cooperated with the municipality, and academic institutes such as the Faculty of Nursing, Khon Kaen University, in providing permanent AFPHC.

Age-friendly primary health care: after development

After the study, the primary care unit re-organized its service to meet demand with emphasis on cultural and professional attitude, medical biology, and knowledge about aging and aged care. The age-friendly primary health care components of this PCU were as follows:

1. Behaviors of health providers appropriate to Thai society and culture Health providers should pay more respect to the elders, such as making a “Wai” when the elder came to use the service, greeting them occasionally, using the words “Mae (Yai)” or “Por (Yai) as the pronoun of respect, listening to their problems and being alert to solve them, etc.

2. Age-friendly care services These were the services that recognized the elders at the clinic, at home and in the community, and included services that covered geriatric problems and their families. Accordingly, yellow, which is the color of Sphaerocoryne clavipes (Dok-lam-duan) and the symbol of the Thai elders, was used in the names of the following services provided for elders:

2.1 Age-friendly service at the clinic

2.1.1 Yellow card was a special card for the elders who are 65 years. Then, these elders would be served before people of other ages. Moreover, this Yellow card was bigger than other cards, so the instruction about taking care of themselves is included on the back of the card for information of the elders and their families.

2.1.2 Yellow service was one-stop service at the clinic that provided for the elders. The services offered at their places include a health check, medicine pick-up, and advice on how to take care of themselves.

2.1.3 Yellow corner was the particular corner in the clinic for the elders and their families while waiting for service. They would be greeted, could exchange health care experiences among themselves, and consult on self-care.

2.2 Yellow follow up was the service provided to the elders who had ever come to the health center and needed follow up. Their information was handed to the nurses responsible in that area in order to follow up with the elders who need help. They would deliver medicine to their homes, OPD at home, and 24 hour emergency call service.

2.3 The service covering every stage of health care This included services for older people who were sick in the end-stage of their life, and the service from the day-time health volunteers who took care of the disabled elders at home.

2.4 Taking care of the whole family Through home visits, the staff could help the family members solve problems, and promote their ability to take care of the elders.
3. Age-friendly environment Numerous environmental improvements to the health center have been made in order to better assist the elders. For example, the service was moved down to the ground floor of the building. There is a ramp with a handrail to prevent the elders from falling, the landscape is decorated, and the health center is kept neat all the time. There are both symbols and signs telling what are where, and warnings about such things as different path levels. Handrails were installed in restrooms for increasing safety and convenience.

Factors related to age-friendly primary health care development

1. Factors for success: The important factors for development were 1) The attitude of the research team, 2) the process of development participation, 3) the social capital of the community study, and 4) outside personnel factors. The attitudes of the research team for development were positive thinking and mutual benefit. The process of participating development began with: 1) easy-to-difficult steps, 2) used social capital and promoted new abilities, and 3) set the stage for idea exchange.

The outside personnel included a gerontological advanced practice nurse who provided information/consultation to the PCU’s health care personnel about ideas, knowledge, and understanding the elders, as well as those from the managers and directors of nursing, and the medical professors.

2. The barriers to development: 1) The policy of the dominant hospitals toward the PCU was the main barrier to development because this center was under the control of the tertiary hospitals whose main job was not primary care. However, the process had to depend on a policy which could be changed at any time. As a result, the staff of this PCU became uncertain about the policy. 2) The current career evaluation in hospitals emphasizes the performance of individual staff members, while the system of providing service for older people depends on team work. Accordingly, the staff became concerned about their job responsibilities, which resulted in discontinuous work.

The results of this study were synthesized into the development of age-friendly primary health care model (Figure 2).
Discussion

It was found that under the concept of AFPHC at the health center there were both similarities and differences to the principles of the AFPHC of the World Health Organization.3-4

1. Personnel – Age-friendly behaviors  It was found that the effective ways that personnel providing the service should be in accordance with Thai culture,14-16 especially when showing respect for the elders, using kinship pronouns when talking with the elders, and greeting them as if they were their relatives or a member of their own family. On the other hand, the WHO’s age-friendly principles usually emphasized the preparedness, knowledge, attitudes, and skill of the personnel taking care of the elders.3 The results of the study, however, showed that particular knowledge, attitudes, management, social and cultural skills are the requirements of professional nurses. Nurses must have knowledge of gerontrological, family and community nursing. This knowledge would help them to holistically take care the elders, and provide aged and gender sensitive care. To carry out the AFPHC process, management skills, such as cooperation, negotiation, conflict management, time management, progressive management, and resource management, are needed. The nurses have to possess social and culture skills, especially the culture of the elderly in the community, and be able to understand the nature and the condition of each one.17,20

2. The services that reflect the demands, health problems, and limitations of the elders  The services at the clinic include the Yellow line, Yellow service, and Yellow corner, while the service at home is the progressive service, such as home visitation, medicine delivery, progressive OPD, etc.

Furthermore, the study showed that AFPHC took care of the elders when they were ill, especially in the final stage of their life and when they wanted to leave this world peacefully and did not want to put burden on their families. Also, it included the service for their family members which was different from the study of the World Health Organization.

3. Age-friendly environment of the PCU  It was found that an age-friendly environment was related to a convenient and well-organized location for the safety of the elders. For example, health services were moved to the ground floor; avoid using the stairs and used a ramp with a handrail, etc. This was different from the study of the World Health Organization regarding a convenient environment, for example, providing chairs for the elders, but the service at the health center in the research area was fast and the elders were used to sitting on the floor.

Recommendations

1. Organizations such as the government, local administrations, and the hospitals, should adapt the AFPHC concepts as one of their policies in order to promote the standard of providing age-friendly primary health care for older people.

2. Care should be taken that the AFPHC in Thailand is appropriate to Thai society and culture, family care, and a good death when the elders are in the final stage of their life. It is a progressive service in both social and health aspects.

3. In order to provide better care for older people, the PCU nurse should acquire knowledge and skills in gerontological nursing as well as community nursing.

4. There should be a study of AFPHC in other areas in order to promote age-friendly primary health care standards for Thai elderly.
Acknowledgements

Researchers are grateful to Graduate School, Khon Kaen University, and Thai Health Promotion Foundation, Thailand for supporting this study.

References

การพัฒนาบริการสุขภาพระดับปฐมภูมิที่เป็นมิตรกับผู้สูงอายุ : กรณีศึกษาที่สุขภาพชุมชนแห่งหนึ่ง

คุณที่ ตุ๊ ติโอ ระวี, วรรณชา ศรีสุขสันต์, ชนินทรา นั้นเนีย อึน, อมร เปรียญก์

บทคัดย่อ: การวิจัยเชิงปฏิบัติการในครั้งนี้มีวัตถุประสงค์เพื่อพัฒนาบริการสุขภาพระดับปฐมภูมิที่เป็นมิตรกับผู้สูงอายุในสุขภาพชุมชนแห่งหนึ่งในจังหวัดอ่างทอง ประเทศไทย โดยมีหลักการบริการสุขภาพที่เป็นมิตรกับผู้สูงอายุซึ่งการดำเนินงานโดยเป็นกระบวนการที่มีขั้นตอนเป็นมิตรกับผู้สูงอายุเพื่อนำสู่การพัฒนาตามแนวคิดเชิงกระบวนการของการวิจัยเชิงปฏิบัติการแบบความรู้สึกพื้นที่ ทุกข์ของผู้ทำการวิจัยเกี่ยวกับการประเมินผลการดำเนินงานที่มีชัดเจนกว่า การสนับสนุนการทำงานที่ส่งเสริมสุขภาพที่มีหลักการที่เป็นมิตรกับผู้สูงอายุและครอบครัว บุคคลทางการสุขภาพชุมชน อาสาสมัคร สาธารณสุข และการศึกษาอาสาทวาร์คอาชีพปฐมภูมิโดยการวิเคราะห์เหตุการณ์ที่เกิดขึ้น การช่วยเหลือบริการทางสุขภาพโดยการสื่อสารที่มีความสื่อสารดี.

ผลการศึกษาพบว่า
1) การบริการสุขภาพที่มีมิตรกับผู้สูงอายุของเราช่วยลดการเกิดความเสี่ยงด้านสุขภาพ มีมาตรฐานเดียวกันทุกปีและเวลานานการจัดการสุขภาพดีไม่เคยเคยมีผู้ที่มีความสามารถและสุขภาพดีที่จะให้บริการตามนโยบายการบริการอย่างไม่สม่ำเสมอต่อผู้สูงอายุที่ให้ความมั่นใจกับบริการสุขภาพที่เป็นมิตรกับผู้สูงอายุในประเด็นต่อการผล การบริการเชิงรุก ความสะอาดที่เหมาะสมกับผู้สูงอายุ การต้องการเร่งด่วน การดูแลที่ครอบครัว และสิ่งแวดล้อมทางกายภาพของผู้สูงอายุพัฒนาอย่างอย่างต่อเนื่องเพื่อการผลการผล

2) การพัฒนาการบริการที่มีมิตรกับผู้สูงอายุ ประกอบด้วย 1) การจัดทำหลักเกณฑ์และจัดทำบริการที่เป็นมิตรกับผู้สูงอายุ 2) การปรับเปลี่ยนพฤติกรรมการบริการและสิ่งแวดล้อมทางกายภาพที่เป็นมิตรกับผู้สูงอายุ 3) การพัฒนาของการบริการที่เป็นมิตรกับผู้สูงอายุ และ 4) การขยายแนวร่วมเครือข่ายการพัฒนา

3) บริการสุขภาพระดับปฐมภูมิที่เป็นมิตรกับผู้สูงอายุของสุขภาพชุมชนมีหลักการพัฒนาด้วย องค์ประกอบด้วย 1) พฤติกรรมการบริการสุขภาพที่ต้องการต้องส่งเสริมสุขภาพระดับปฐมภูมิ 2) การบริการสุขภาพที่เป็นมิตรกับผู้สูงอายุ และ 3) สิ่งแวดล้อมทางกายภาพที่เป็นมิตรกับผู้สูงอายุ

4) ปัจจัยเริ่มต้นของปัญหาที่เกิดจากการพัฒนา คือ 1) พื้นที่ในเขตบ้านของผู้สูงวัย 2) การบริการจัดการที่ชัดเจนประการเฉพาะวันเริ่มต้น 3) ทุกข์ทรมานในส่วนที่สื่อสาร และ 4) การพัฒนาการสุขภาพที่มีมิตรกับผู้สูงอายุ ปัจจัยที่เป็นข้อเรียบร้อยของการพัฒนาคือ การเปลี่ยนแปลงนโยบายการบริการสุขภาพชุมชนของหน่วยงานต่างๆ และระบบการประเมินผลงานบุคลากรสุขภาพชุมชนที่เน้นผลงานทางบุคคลากรกับการกลุมและรายโครงการ

วารสารวิทยาการพยาบาล 2008; 12(2) 131-141

คำสำคัญ: ความเป็นมิตรกับผู้สูงอายุ ผู้สูงอายุ  การพัฒนาสุขภาพระดับปฐมภูมิ

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