Development of Care Services for Older People with Dementia in a Primary Care Setting

Bussarin Lhimsoonthon*, Wanapa Sritanyarat, Somporn Rungrengkolkit

Abstract: This technical collaborative action research aimed to develop dementia care services for older people in a primary care setting, in central Thailand. Participants included primary care providers, community health volunteers, older people, and caregivers. Data were collected during April 2016 to February 2017 using in-depth interviews, focus group discussions, observations, and document reviews. Qualitative data were analyzed by content analysis, and quantitative data were analyzed by descriptive statistics.

     Results: Phase 1 Situational Analysis. The dementia services provided depended on knowledge and understanding of dementia among clients and providers. Clients perceived dementia as an aging process. There was no need for diagnosis and specific care. Providers recognized severe dementia and referred clients to psychiatric hospital; Phase 2 Development. The primary care providers and community health volunteers were educated and trained regarding dementia and screening. Among 319 older people, there were nine with dementia and three with mild cognitive impairment, and those with dementia were referred for proper diagnosis and treatment. Coordination and consultation services were provided on demand and a cognitive stimulation program and home care were provided by nurses. Phase 3 Synthesis. A dementia care service pathway was developed consisting of six services: 1) awareness raising and capacity building; 2) dementia screening; 3) referral for diagnosis and treatment; 4) coordination/consultation services; 5) cognitive stimulation; and 6) home care. We conclude that nurses in Thailand need to be educated and trained to provide better dementia care and the six dementia care services based on the pathway of primary care setting proved be an important strategy to achieve this.

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Introduction

Dementia is one of the most prevalent problems found in older people, and it is known as a major cause of disability and dependency.[1] In 2018, it was reported that there were 50 million older people with dementia worldwide and a new case is diagnosed every three seconds.[2] People with dementia is estimated to reach 152 million by 2050, and 68% of these will be in low and middle-income countries.[1] In 2013, the prevalence of dementia among Thai older people ranged from 2% to 10%.[3] In 2014 the Thai National

Health Survey found that the prevalence of dementia among older people was 8.1%[4] but by 2016, there were 600,000 Thai older people with dementia, and this is estimated to increase to 1.4 million within the next 20 years.[3] It is also estimated that prevalence of dementia increases two-fold every ten years.[5] Dementia tends to increase with age and the dementia rates among older people aged 60-69 years, and 70-79 years were reported at 4.8% and 7.7%, respectively, and the rate went up to 22.6% among those over 80 years.[5]

The World Health Organization (WHO) and governments of various countries have established policies, programs, or projects to cope with these problems; and the WHO launched a ministerial conference on global action against dementia.[6] Health organizations of some countries have established guidelines for dementia care services (DTCS), by using empirical research evidence, for example, the Japanese government launched the Project for Improvement of Medical Care and Quality of Life for People with Dementia in 2008. This enables older people with dementia to gain access to comprehensive and coordinated dementia care services at all levels, including primary care.[7] The Australian government launched the policy, "Dementia Initiative: Making Dementia A National Health Priority and provides community care packages from screening to the end-stage dementia care.[8] Among these countries, community and primary care are the main focus of dementia care service development.

In contrast, Thailand has not yet identified dementia as a national health priority. There are no specific dementia care service for older people and their family caregivers (FCGs), especially at the primary care level.[9] Thailand practice guidelines for dementia care, diagnoses, and treatment are available only at the tertiary care and specialized care levels. Secondary and primary care levels take only a referral role.[10] Results from the development of comprehensive dementia care service system in Thailand both in urban and rural communities, showed that providing dementia care services at all health care levels,

including primary care could increase dementia access and improve the quality of life of older people with dementia and their caregivers in the community.[9,11] The expert committee of the Institute of Geriatric Medicine, Ministry of Public Health, Thailand recommended that early detection at primary care level is the key to improve better outcomes.[11]

Evidence shows that Thai people with dementia are usually taken for diagnosis and treatment when the disease has entered the moderate stage with obvious emotional and behavioral changes observed by caregivers.[12] Only one out of six Thai older people are diagnosed by doctors and referred to tertiary care facilities, and 72% of Thai older people with dementia do not receive treatment and 45% lack protection and rehabilitation opportunity due to limited knowledge of caregivers and primary care providers.[12]

Thailand's healthcare services are classified into four levels based on the capacity of staff, size of a unit, amount and type of care, and the degree of specialization. These are: 1) *primary health care* organized by the communities and provided by community health volunteers (CHVs); 2) *primary care*, integrated holistic care provided by healthcare professionals; 3) *secondary care,* a more complicated and specific care located in the community hospitals, provided by generalists and specialized care personnel; and 4) *tertiary care*, more specific and complicated care provided by specialists, located in the regional, general, specialized, and university hospitals. Primary care units and settings at the primary care level are governed by 4 sectors: 1) the district/provincial health office; 2) the community hospital; 3) the municipality or local organization; and 4) the Thai Red Cross.[13]

In this study, the selected primary care unit and setting is under the Thai Red Cross organization and the provincial health office. It is responsible for an urban community comprising of 14.68% of older people.[14] The primary care providers were interested in developing dementia care services for older people in their setting.

Objectives: To study the existing situation of DTCS in the selected PCS; develop dementia care services in the PCS; and describe the outcomes of the development of DTCS.

Conceptual Framework

To develop dementia care services for older people and their families, a situational analysis of the studied PCS and previous knowledge from literature reviews were used as input of the development. The action research cycle based on the work of Kemmis and McTaggart[16] was used to guide the research process: planning, acting, observing, reflecting, and re-planning. The expected output/outcome of the development was the DTCS for older people and their families that were suitable for the primary care setting (Figure 1).
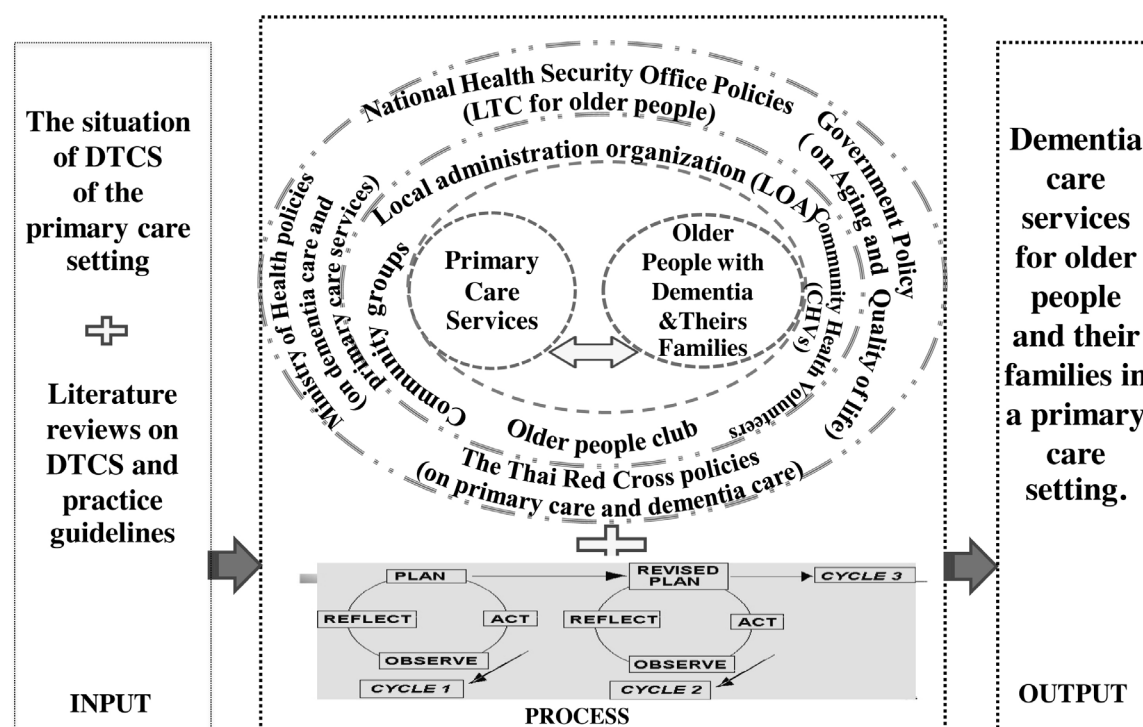

Figure 1 Conceptual framework of the study

Method

Design: This study employed technical collaborative action research.[15-16] It tested solutions from existing knowledge in practice by joint collaborative research agreement.

Study setting: The studied PCS was located in an urban area of a central region, Thailand and the criteria for selection of this was that: 1) the community has entered an aging society, 2) there were older people with dementia, and 3) the administrators and primary care providers agreed to participate in the study.

Participants/Informants: The participants of this study included 14 primary care providers (PCPs), 31 community health volunteers (CHVs), 319 older people, and 12 caregivers (CGs) of older people with dementia. The action research team (AR team) consisted of the researcher and nurses who were key actors.

Research instruments: Two sets of instruments were: dementia screening tools and data collection tools. Dementia screening tools used were recommended by the expert group of Institute of Geriatric Medicine, Ministry of Public Health, Thailand.[11] Three sets of standardized tools were used to classify older people

into three groups: normal condition, mild cognitive impaired (MCI), and dementia. The researcher was trained and received permission to use these tools in this study. Some of the screening tools were used by CHVs and nurses in the PCS nation-wide. The three sets of dementia screening tools were as follows:

Set 1: Screening tools assessed by CHVs

The 2Q (Patient Health Depression Questionnaire: 2 Q (PHQ-2) consists of two items with "Yes" or "No" answers regarding depressed mood and loss of interest which is required to establish a diagnosis of DSM-IV depressive disorder.[17] The PHQ-2 into Thai as the consisting of the first 2 questions of the Patient Health Depression Questionnaire – 9 (PHQ-9) and was developed for screening major depression in 2008.[18] The 2Q Thai version's sensitivity and specificity were 80% and 73% respectively.[19] Each item of the 2Q is answered in a "Yes", or "No" format. If older persons say "yes" to either one or two questions, they need to assess for depression by using Thai Geriatric Depression Scale. Those who say no to both questions, meaning no depression, pass this tool and can continue onto the 14Q tool for cognitive test.

The 14 Q (Memory Screening Test)[20] consists of 14 items with a four-point rating scale: 1 = 'the event has not happened yet, or happens once a year;' 2 = 'the event occurs infrequently or twice a month;' 3 = 'the event occurs frequently or nearly every week;' and 4 = 'the event occurs nearly every day.' A score over 40 indicates cognitive problems and the persons need to be tested by the second set of screening tools. The Cronbach's alpha coefficient for this tool was 0.85.

Set 2: Screening tools assessed by PCPs

The Barthel Activity of Daily Living (BADL) Questionnaire[21] was created by Mahoney and Barthel in 1965,[22] and has a 10-item instrument used to assess functional ability by measuring the degree of independence of a person, included feeding, moving from a chair to the bed and returning to the chair, grooming, transferring to and from the toilet, bathing, walking on a level surface, going up and down stairs, dressing, and continence of bowels and bladder, which has a total score of 20 points. The total score of 0-4, means the person is totally dependent; a score of 5-8 means the person is severely dependent; 9-11 indicates moderate dependence, and 12+ is mild dependence. This questionnaire was content validated by the tool developer, and has good structural and criterion validation. The inter-rater reliability is good.[23] The test-retest reliability of the tool for this study was 0.76.

The Instrumental Activity of Daily Living (IADL) Questionnaire[22] was created by Lawton and Brody in 1969[22], which measures the complex ability of older people. It consists of five questions on walking or going out, food preparation or cooking, doing household chores and laundry, exchanging money, and using public transportation. This questionnaire had sensitivity and specificity of 71% and 75% respectively.[24] The test-retest reliability of the questionnaire for this study was 0.95.

The Thai Geriatric Depression Scale (TGDS). This 15-item instrument was adapted from the 30-item Thai Geriatric Depression Scale (TGDS).[25] The short GDS assesses domains of 1) a sad mood and pessimistic outlook, 2) mental and physical energy, 3) a positive or happy mood, 4) agitation or restlessness, and 5) social withdrawal. The response choices for each item are in a "Yes" or "No" format and the cut-off point is 7. The scores of 0-7 points mean having no depression, while the scores of 8 points or higher are considered an indicator of depression.[26] This scale had a sensitivity of 79% and a specificity of 81%, when using a cut-off of ≥ 8.[26] The reliability of this tool for this study was 0.72.

The Mini-Mental State Examination: Thai version 2002 (MMSE-Thai 2002)[10,27] This test consisted of 11 questions: orientation for time (1-5 points), orientation for place (1-5 points), registration (1-3 points), attention/calculation (1-5 points), recall (1-3 points), naming (1-2 points), repetition (1 point), verbal command (1-3 points), written command (1 point), writing a sentence (1 point), and visuo-construction (1 point).

The cut-off points are determined based on the persons' educational levels as follow: 1) An education lower than the primary level, the cut point is a score of 14 or lower, and this scale had a sensitivity of 35.4% and a specificity of 76.8%; 2) An education at the primary level, the cut of point is a score of ≤17, and this scale had a sensitivity of 56.6% and a specificity of 93.8%; and 3) An education higher than the primary level, and the cut of point is ≤22, and this scale had a sensitivity of 92% and a specificity of 92.6%

The above tools were used to classify older people in this study into either normal condition or dementia. Older people who had scores below the cut off points were considered to be suspect with cognitive problems or dementia and needed to be tested with the third set of screening tools. The test-retest reliability of the tool for this study was 0.95.

Set 3: Screening tools assessed by PCPs.

The Thai version of the Montreal Cognitive assessment (MoCA-T). This version was translated by Solaphat Hemrungrojn.[10] This test is designed as a rapid screening tool for MCI. It is a paper-and-pencil tool that assesses multiple cognitive domains including attention, concentration, executive functions, memory, language, visuo-spatial skills, abstraction, calculation, and orientation. The full score is 30 points, with a cut off score <25, adding 1 point for participants with ≤ 6 years of education, and the sensitivity and specificity were 80% and 80%.[28,29] The test-retest reliability of the tool for this study was 0.98.

Other data collection tools comprised in-depth interviews and observation guidelines, data recording forms, and field notes. These tools were validated by three experts, two working in dementia care and the other an expert in qualitative research.

Research process

The research process comprised of three phases: situational analysis, development and synthesis phases (Figure 2).
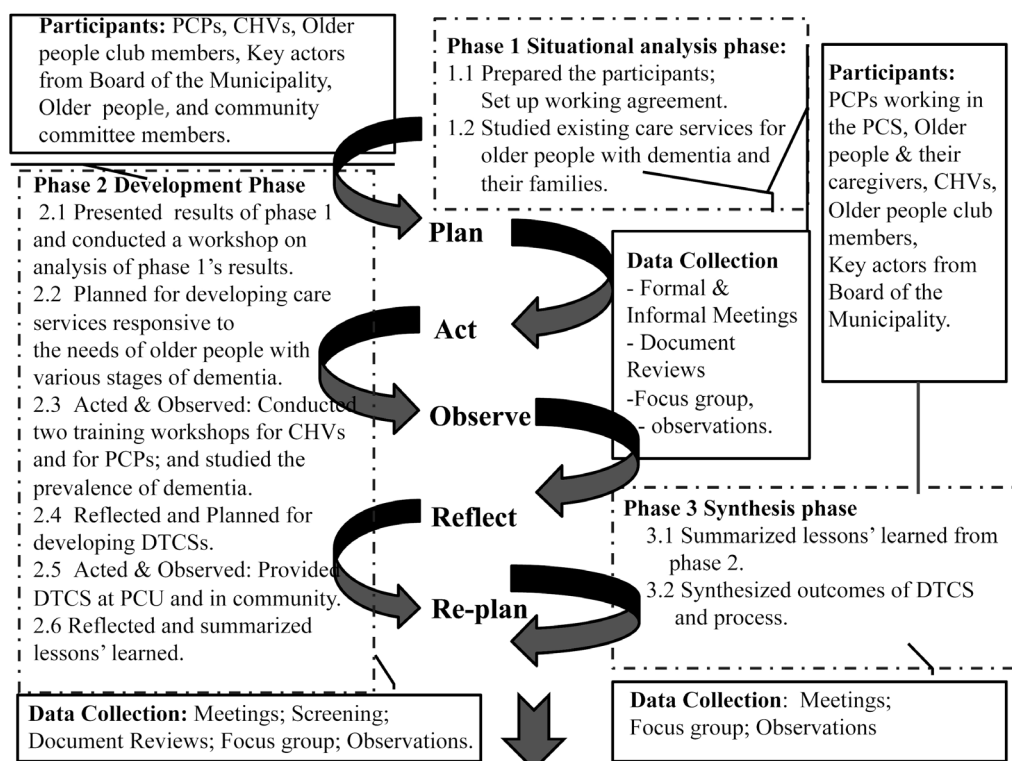

Figure 2 Research process of the study

1. The situational analysis phase

This phase explored existing dementia care services for older people and their families of the studied PCS. Key informants were 14 PCPs (12 nurses and two multidisciplinary care team members), 31 CHVs, two members of older persons′ club, and two key staff from the Board of the Municipality. Data were collected via formal and informal meetings, document reviews, in-depth interviews, focus group discussions (FGDs), and participation and non-participation observations, and an AR team was formed to work on development of dementia care services.

2. The development phase

The development of dementia care services started with dementia case findings by screening older people in the community. Two training workshops were conducted; one for CHVs and the other for nurses to ensure their capability of administering the standard tools. The screening tool set-1 was used to assess community older people by 31 trained CHVs. Of the total 985 older persons, 319 older persons (32.38%) participated in the dementia screening process. The screening tools set 2-3 were used by 14 trained nurses to assess older people who met the criteria from set-1 and set-2, respectively.

The AR team met formally and informally to plan, act, reflect, and re-plan the dementia care services for MCI and dementia groups. Key informants consisted of 14 PCPs, four CHVs, seven members of the older persons' club, and two representatives from the Board of the Municipality. Data were collected via focus group, in-depth interviews, observations, informal conversations, and document reviews.

3. The synthesis phase

Dementia care service provision that were learnt about in the development phase were summarized and synthesized. The participants of this phase included PCPs, CHVs, members of the older persons' club, and representatives from Board of the Municipality. Formal meetings and FGDs were conducted to reach the consensus among participants.

Ethical Considerations

This research was approved by the Human Research Committee of Khon Kaen University, HE582362. The researcher provided clear and sufficient information for prospective participants' decision to be research volunteers. They were given the opportunity to consult with others before making the decision to take part in the study. The researcher assured the participants that the data collected from them would be kept strictly confidential and used codes instead of the real name, and the actual study site and participants' identities were kept confidential throughout. Signed consent forms were used to confirm the participants' agreement with the study.

Data analysis

Quantitative data were analyzed using descriptive statistics such as frequency and percentages. Qualitative analysis was performed by content analysis[30] in six steps: Step 1, Read and understand the wording from several types of information derived from various sources and data collection methods (interviews, FGDs, observation); Step 2, Identify the coding and then consider the key point of the code is set to the index; Step 3, Compile data with the same index code. To create categories, each group needed to be homogeneous and in some categories sub-categories were formed. Step 4, Consider content in each subject group. Compare data, interpret and create conclusions; Step 5 Consider conclusions, interpret and examine the meaning; and Step 6, Writing the conclusion. An example of this process is given below:

Data (Code of key informant)	Coding index	Category
Focus group: PCPs.		
PCP 2: If there is a patient with forgetfulness and mental problems, we will send him or her to the psychiatric hospital. We know that we do not have a doctor, a specialist in this way	Referral service for diagnosis & treatment provided for a patient with suspected dementia. (Coding 42)	Dementia care service at PCU: Referral service
Home visit to person with dementia:		
Family caregiver: A nurse visited my mom at home. She suggested me (FCG) to send her (mother) to the psychiatric hospital. Since I have to work, I would rather keep her at home.	Home visit & referral service for a patient with suspected dementia.	Dementia care service at home: Home visit & referral service

Trustworthiness

The credibility of the study was ensured by data triangulation from different data sources and by the member check with PCPs. Data and study results were shared and verified by the representatives of each group, including older people, FCGs, CHVs, and PCPs of all sectors. Data were peer debriefed with the advisory team. Dependability of the study was confirmed by describing the research process clearly and in a systematic manner, detailing each step of each phase, known as the audit trail. Transferability was done by comparing the result of the studied site to other PCSs. Conformability of the study was assured when the credibility, dependability, and transferability were undertaken. The developed dementia care services of this primary care setting can be compared and applied to other sites within urban contexts.

Findings

Phase 1: The situational analysis phase

Results showed *dementia care services* provided at the primary care setting depended on *knowledge and understanding on dementia* of primary care providers and clients. Data revealed three main categories of understanding and care services provided for older people with dementia as followed: Category 1)

dementia was normal aging process – self-care at home or no specific care service was needed; Category 2) dementia was a condition of disability – home care service was provided; and Category 3) dementia was a mental health problem – referral service to psychiatric hospital was provided. Because of the understanding regarding dementia as normal aging, disability, and mental health problems; three types of services: self-care, home care, and referral care services were provided by PCPs of the PCU.

Category 1: *Dementia is a normal aging process*

Self-care at home or no specific care service was needed. Both PCPs and clients believed that forgetfulness and/or dementia was common in older people. One provider said, "Dementia is a natural consequence of being old. I suggest a family caregiver to take care of them (older people) at home." Another provider stated "Dementia is a common symptom in elderly, there is no need to be treated. Family members need to take care of them". An older man said, "We get demented when we are old." One older lady stated, "If you were old like me, you will understand (forgetfulness)," while another woman added, "We must actually face forgetfulness when we get old." One family caregiver explained, "Dementia is a normal process that cannot be treated...It is a waste of time and money to seek diagnoses and treatment."

Category 2: *Dementia is a condition of disability*

Home care service was provided. One PCP used the clinical symptoms of "inability to walk, to eat, and to talk" to differentiate normal older people from people suspected of dementia. One nurse added, "Older people with dementia cannot help themselves in daily life tasks, they do need assistance from others. We usually provide a home visit to these clients." Since this was an urban community, most of the CHVs were busy with their own work and were reluctant to do home visits due to their safety and work issues. One CHV said, "We prefer to do a home visit, but we are concerned about our safety and competency. A home health care nurse is better than us. Thus, home care services of this PCU usually done by nurses".

Category 3: *Dementia is a mental health problem*

Referral service to a psychiatric hospital was provided. "Dementia is a matter of psychiatric problems." This statement was reflected by most of the PCPs. They viewed older people with behavioral and emotional disorders of dementia as those with psychiatric problems that needed to be referred to the psychiatric departments/hospitals. Some of the nurses said that they studied this disease in the psychiatry subject. One nurse stated that "I could remember, I had learned about dementia in psychiatric nursing subjects in 3rd years, although I already forgot its content." Another added "I am not a psychiatric nurse, if I found older people suspected of dementia, I will refer them to the psychiatric department/hospital, and treatment could not help them getting better." It was observed that some FCGs took older people with emotional and behavioral problems of dementia directly to the psychiatric department at a tertiary care level for diagnosis and treatment.

Phase 2: The development phase. *Development of dementia screening services at the PCS.*

Preparation of PCPs and clients: Findings from Phase 1, were discussed among the AR team to plan for developing dementia screening services in the community and at the PCU by trained CHVs and nurses. The CHVs were reluctant to screen older people at home. Thus, 14 PCS nurses agreed to take roles in all screening tools. Four CHVs helped in spreading out information to older people and their families to participate in the study throughout the community.

Dementia screening process: When implementing the 14Q tool, nurses reflected that this tool took longer time than the familiar Abbreviated Mental Test (AMT) recommended by the National Health Security Office's guideline.[31] The AR team then, revised the plan using the brief AMT, a 10-item scale instead of the 14Q. The original AMT tool was introduced by Hodkinson in 1972 as a quick screening tool for assessing intact of short- and long-term memory, attention, and orientation.[32] A score of 7 was the cut-off point suggesting cognitive impairment.

In total 319 participants were assessed (249 at PCU and 70 in the community). Findings showed 307 older people met normal criteria for all research instruments (96.2%), three had mild cognitive impairment or MCI (0.9%), and nine of them were suspected as having dementia (2.8%).

Dementia screening services at chronic care clinics: Three participants who passed the AMT test had attended the non-communicable diseases (NCD) clinic to consult their forgetfulness symptoms with the nurses and asked for further investigation. A client said, "Forgetfulness that was not normal condition but not crazy, called Ting Tong (in Thai)". After the screening, they were identified as MCI group. The AR team agreed to add dementia screening services to the NCD clinic at the PCU and in

community. However, these screening services could not be provided regularly due to other urgent work and/or direct policies from the Provincial Health Office (PHO), local administration organizations (LAOs), and/or the Thai Red Cross.

Development of dementia referral services:

Dementia referral care services: Two out of nine participants identified with dementia, their FCGs agreed to be referred for diagnoses and treatments to the neurological department of the secondary care hospital. The FCGs of four participants with dementia made a decision to keep them at home. One FCG wanted to get referral services later. The FCGs of three participants with severe dementia, wanted to take care of them at home. Dementia care plans were put into online health databases (JHCIS) of the PCU in order to coordinate care among PCPs and with upper care level.

Development of Dementia care services.

Non-pharmacological treatment and care services: Since specific pharmacological treatment for dementia was not available at the PCU, ***cognitive stimulation activity*** was conducted for various groups with dementia. The *group-cognitive stimulation* was performed by trained nurses at the NCD and geriatric clinics every Tuesday. Activities included practices of calculation, concentration, listening to and writing the news from the radio/TV, playing maze games and recall games, and doing homework assignments. It was noted that older people who held a bachelor's degree did all homework exercises and enjoyed activities, while older people who finished primary school did not enjoy doing homework. Nonetheless, older people were active participants in all activities provided at the clinics. Three participants with MCI

were members of the older people's club which had regular social activities every evening from Monday to Friday, including yoga and dancing activities.

Development of dementia home care services:

Home care services for nine with dementia were provided by nurses. Specific dementia care activities were added to the care plan of each individual/family, especially for three participants in a severe stage of dementia. According to Thailand long term care (LTC) policy, the CHVs were trained to be community caregivers of LTC older people/patients at home.[33] However, these trained CHVs did not perform their roles. In this study, the FCGs, mostly daughters of older people, sacrificed their work and lives to take care of their parents with dementia. Some needed trusted persons to help take care of participants with dementia, while others needed information and advice on emergency and symptom management, and on welfare of disability rights. Two FCGs asked for aide on wheelchairs and some medical supplies.

Phase 3: The synthesis phase.

The outcomes from the development of dementia care services at the primary care setting comprised six activities/services: 1) awareness raising and capacity building; 2) dementia screening; 3) referring for diagnosis; 4) coordination/consultation of treatment and care (including welfare for disability' rights); 5) cognitive stimulation programs; and 6) home care. Nurses played key roles in providing six dementia care services for older people with dementia at primary care settings.

The dementia care service path way was synthesized and proposed as the guideline for the primary care setting (Figure 3).
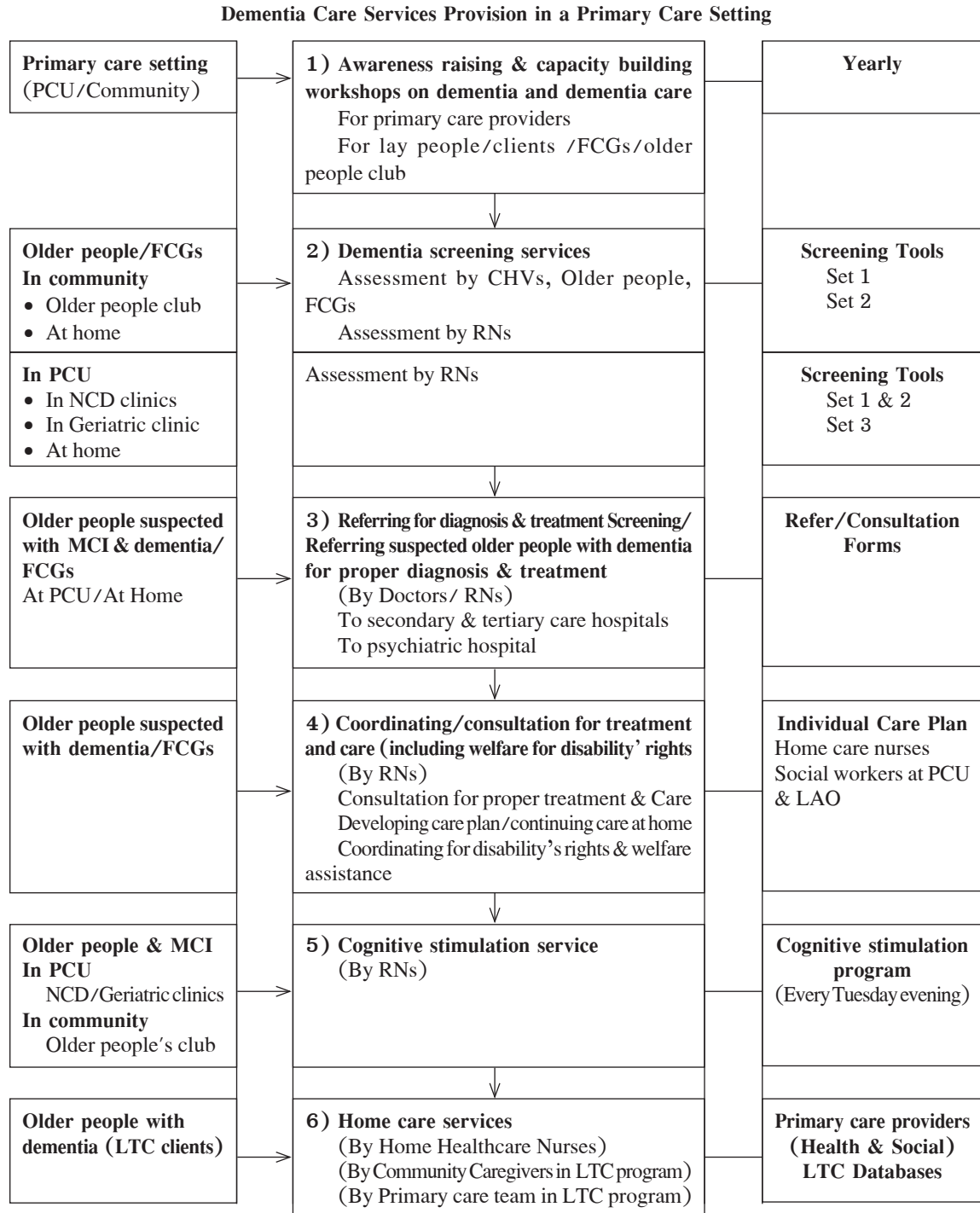
Dementia Care Services Provision in a Primary Care Setting

Primary care setting (PCU/Community)	1) Awareness raising & capacity building workshops on dementia and dementia care
	   For primary care providers
	   For lay people/clients /FCGs/older people club
		Yearly

Older people/FCGs
In community
• Older people club
• At home
	2) Dementia screening services
	   Assessment by CHVs, Older people, FCGs
	   Assessment by RNs
		Screening Tools
		Set 1
		Set 2

In PCU • In NCD clinics • In Geriatric clinic • At home	Assessment by RNs	Screening Tools Set 1 & 2 Set 3

Older people suspected with MCI & dementia/ FCGs
At PCU/At Home
	3) Referring for diagnosis & treatment Screening/ Referring suspected older people with dementia for proper diagnosis & treatment
	   (By Doctors/ RNs)
	   To secondary & tertiary care hospitals
	   To psychiatric hospital
		Refer/Consultation Forms

Older people suspected with dementia/FCGs	4) Coordinating/consultation for treatment and care (including welfare for disability' rights
	   (By RNs)
	   Consultation for proper treatment & Care
	   Developing care plan/continuing care at home
	   Coordinating for disability's rights & welfare assistance
		Individual Care Plan
		Home care nurses
		Social workers at PCU & LAO

Older people & MCI
In PCU
   NCD/Geriatric clinics
In community
   Older people's club
	5) Cognitive stimulation service
	   (By RNs)
		Cognitive stimulation program
		(Every Tuesday evening)

Older people with dementia (LTC clients)	6) Home care services
	   (By Home Healthcare Nurses)
	   (By Community Caregivers in LTC program)
	   (By Primary care team in LTC program)
		Primary care providers (Health & Social)
		LTC Databases

Figure 3 The synthesis of dementia care services path way for older people and their families in a primary care setting.

Discussion

Results from the situational analysis phase showed that DTCSs provided at the PCS depended on knowledge and understanding of clients and providers. Previous studies reported that general healthcare professionals including nurses perceived dementia as a natural aging process and/or mental health problems.[9,11] Thus, there was no need for diagnosis and treatment; but there was a perceived need to go to psychiatric hospital when having psychiatric symptoms. Both PCPs and FCGs tended to take care of them at home. Thus, older people did not get access to dementia services for early detection and proper management.

Results of the *screening service development* showed that at least nine older people were identified as having dementia, three had severe dementia and three had MCI. The prevalence of dementia in this study was 2.8%. Compared to the data from the Thai National Health Survey in 2014 reported that the prevalence of dementia among older people was 8.1%.[4] Findings from the studies in urban areas of the central region of Thailand reported the prevalence of 5% in older people club-based, and 18.6% in community-based groups.[34-35] The prevalence of dementia of this study may have been under-reported due to the new experience of PCPs in providing completed dementia screening services using unfamiliar three sets of tools. Enhancing the capability of PCPs/nurses together with using more appropriate screening tools could help early detect people with dementia in the primary care setting.

The development of referral service for dementia diagnosis and care management was challenging for the primary care setting due to the knowledge about dementia care of the PCPs. Although, there is the referral guideline, older patients with suspected of dementia were not referred for diagnosis, treatment and care. A previous study reported that Thai older people with dementia were under-diagnosed and did not receive necessary treatment and care.[12] Older people in this study needed to gain more access to proper diagnoses and care management based on types of dementia. The collaboration among healthcare team at all levels to ensure appropriate diagnosis and management of dementia needs to be further developed. PCPs need to be educated and trained to provide screening and referral services for older patients suspected of MCI and dementia both at the clinic and in the community.

The development of *dementia home care services* was limited due to less awareness of dementia of FCGs and CHVs. Evidence has shown that FCGs are determined to take care of their older people at home despite limited resources and understanding about dementia care.[12] It was found that some FCGs did not allow older people with dementia join community activities. Even though they suffered from caregiving duties, they rejected home visits by nurses and CVHs due to stigma of dementia. There is the need to raise awareness and build capacity of nurses/PCPs, FCGs, and CHVs in the setting. The good practice of home care guidelines should be developed to increase acceptance of dementia home care services by nurses and CHVs. When providing home care, nurses and CHVs need to be aware of the stigma regarding dementia and be sensitive to the issues when caring and communicating with FCGs and neighbors of older people with dementia. It is suggested that knowledge sharing and learning through group support could help increase understanding and acceptance regarding dementia care for older people with dementia.[36]

The dementia care service pathway suggests that each primary care unit should provide all six dementia care services: 1) awareness raising & capacity building; 2) screening; 3) referring for proper diagnosis and management; 4) coordinating care & consultation; 5) cognitive stimulation; and 6) home care. Continuity of these care services could improve access to dementia care services. Nurses played key roles in all services of the DTCS pathway, especially in screening service, cognitive stimulation and home care.

Conclusion and Recommendations

In preparing to face a growing aging population with dementia, nurses and primary care providers should take leading roles in developing dementia care services by implementing this DTCS pathway at the primary care settings in the future. This developed DTCS pathway need to be tested, and refined in other primary care settings within urban and rural contexts. Nurses as well as PCPs should be educated and trained to provide six dementia care services using appropriate screening tools.

Limitations of the study

The primary care setting of this action research was located in an urban area, the central region of Thailand. Unlike others, this studied primary care unit was under the Thai Red Cross Society and the Provincial Health Office. The PCU has both primary care and disaster relief functions of the Thai Red Cross. Due to the structures and functions that differ from other PCUs, the dementia care service pathway may need to be adjusted when applied to other primary care settings.

Acknowledgements

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การพัฒนาบริการการดูแลผู้สูงอายุภาวะสมองเสื่อมในการดูแลระดับปฐมภูมิแห่งหนึ่ง

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บทคัดย่อ: การวิจัยเชิงปฏิบัติการแบบมีส่วนร่วมเชิงเทคนิค มีวัตถุประสงค์เพื่อพัฒนาบริการดูแล
ภาวะสมองเสื่อมสำหรับผู้สูงอายุและครอบครัวในการดูแลระดับปฐมภูมิแห่งหนึ่ง เขตภาคกลางของ
ประเทศไทย ผู้ร่วมวิจัย คือ ผู้ให้บริการระดับปฐมภูมิ อาสาสมัครสาธารณสุข ผู้สูงอายุและผู้ดูแล เก็บข้อมูล
ในเดือน เมษายน 2559 ถึง กุมภาพันธ์ 2560 โดยการสัมภาษณ์เชิงลึก การสนทนากลุ่ม การสังเกต
และการศึกษาเอกสาร วิเคราะห์ข้อมูลเชิงคุณภาพ โดยการวิเคราะห์เนื้อหา และวิเคราะห์ข้อมูลเชิงปริมาณ
โดยใช้สถิติเชิงพรรณนา ผลการศึกษา ระยะที่ 1 การวิเคราะห์สถานการณ์ พบ มีการจัดบริการดูแล
ภาวะสมองเสื่อมตามความรู้และความเข้าใจในภาวะสมองเสื่อมของผู้ใช้บริการและผู้ให้บริการ ผู้ใช้
บริการรับรู้ว่าภาวะสมองเสื่อมเป็นธรรมชาติของความสูงอายุไม่จำเป็นต้องวินิจฉัยและดูแลเฉพาะ
และผู้ให้บริการรับรู้ภาวะสมองเสื่อมในระยะรุนแรง จึงส่งต่อไปยังโรงพยาบาลจิตเวช ระยะที่ 2 การพัฒนา
บริการดูแลภาวะสมองเสื่อม มีการให้ความรู้และฝึกอบรม อาสาสมัครสาธารณสุข และผู้ให้บริการ
ระดับปฐมภูมิ เรื่องภาวะสมองเสื่อมและการคัดกรอง ผลการคัดกรองผู้สูงอายุ 319 คน มีภาวะสมองเสื่อม
9 คน มีภาวะการรู้คิดบกพร่องเล็กน้อย 3 คน มีการส่งต่อเพื่อวินิจฉัยและรักษา ประสานการดูแลและ
ให้คำปรึกษาตามต้องการ จัดโปรแกรมพัฒนาศักยภาพสมอง และบริการดูแลที่บ้าน โดยพยาบาล
ระยะที่ 3 การสังเคราะห์ผล การพัฒนาแนวทางการดูแลภาวะสมองเสื่อมในการดูแลระดับปฐมภูมิ เสนอว่า
ควรมี 6 กิจกรรม คือ 1) การสร้างความตระหนักและสร้างศักยภาพแก่ ผู้ให้บริการและผู้ใช้บริการ
2) การคัดกรองภาวะสมองเสื่อม 3) การส่งต่อเพื่อวินิจฉัยและรักษา 4) การประสาน/ให้คำปรึกษา
5) การฝึกสมรรถภาพสมอง และ 6) การดูแลที่บ้าน พยาบาลควรได้รับความรู้และฝึกอบรมเพื่อการจัด
บริการตามแนวทางการดูแลภาวะสมองเสื่อมในการดูแลระดับปฐมภูมิ

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คำสำคัญ: บริการการดูแล ภาวะสมองเสื่อม ผู้สูงอายุ การดูแลระดับปฐมภูมิ

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