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ARTICLE



Phuket Rajabhat University's roles in academic services for the complete aged society in the Andaman triangle provinces

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ABSTRACT

This study aimed to investigate Phuket Rajabhat University's role in academic services for the complete aged society. 65 participants, 65 years old and above, were included in the in-depth interview and focus group, content analysis was used for the data analysis. 959 participants were collected data by the questionnaire. The findings revealed that the university had 9 roles to serve the complete aged society. The strongly level of needs among the samples was to promote activities for the older persons and to empower the caring capacity for the elderly's family members. The moderate level included teaching subjects about the elderly, teaching older persons about the management skills related to the elderly, and providing extra income. The recommendations to improve the academic services to meet the needs of the older persons included the community needs assessment focusing on holistic care, home-based elderly preparation, collaboration with local administrative organizations to train the caregivers, to act as the center for the elderly caring center, career development, to provide senior school training, to arrange the tour and to provide special service for the elderly. The study led to the formulation of guidelines for university academic services for future teaching, policies, and research.

Introduction

The global aging population has become increasing abruptly. Thailand has become an aging society since 2005 and will achieve a complete aged society in 2022. Thailand has currently ranked the third most fastest aging country in the world. Thailand has a million birth population currently between 31–51 years and is getting an aging population in the next few years (Prasartkun, 2014, p. 26). According to Thailand the elderly situation in the year 2017 revealed that 5% of Thai elderly become dependent, especially those aged 80 and above. Besides, Thai older persons were more likely to live alone, rising from 6% in 2002 to 11% in 2017, the main health problems included hypertension and diabetes (Prasartkul, 2020, p. 50, 53). Thailand cabinet resolution on December 4, 2018, then approved the measures to drive the complete aged society to be the national agenda. One of the higher education roles for responding to aging and the complete aged society is to promote older person's health literacy in all dimensions (Department of Older Persons, 2019a, p. 8). However, the preparation for the complete aged society should start from those pre-aging, aged 55–59 years (National Statistical Office and Institute for Population and Social Research, Mahidol University, 2014).

Among the Andaman triangle provinces (Phuket, Phang-Nga, and Krabi) older persons had been increasing from 10.91%, 15.88%, and 11.38% in the year 2018 to 11%, 16.49%, and 11.88% respectively in the year 2019 (Department of Older Persons, 2019b). They suffered from many problems, such as chronic diseases, income generation to support themselves and their families, health risk behaviors, leading to becoming the homebound and bedbound elderly.

One of the major roles of Thailand universities is to provide academic services which mean teaching personnel provided academic services to communities. This may be provided by using university resources or sharing resources both at the university level or at the individual level in various ways according to their expertise. This may be the free academic services or may be charged. However, recently, universities are facing the challenge of decreasing the number of students. They then rather extend their target group for academic services to cover the older persons focusing on the aging workforce and literacy.

Phuket Rajabhat University's (PKRU) mission includes the academic services for three provinces in the Andaman triangle provinces. In the past, most academic services target the youth and young adults focusing on the economic area. The challenge to become the complete aged society, PKRU should shape their role to extend the academic services toward the older persons to support the complete aged society. Nevertheless, the academic services will meet the older persons' needs if they have the data about the university's roles that the older persons expected to promote them to become active and healthy aging.

According to the above context, this study aims to investigate the participants' viewpoint in 1) PKRU's role in academic services for the complete aged society, 2) the academic services needs from PKRU for the complete aged society, and 3) the recommendation for the academic services for the older persons.

Methods

This study was utilized an exploratory sequential design a mixed-methods design. Qualitative and quantitative data were considered equivalent status designs. Firstly, data were collected by using the qualitative method. The results from the qualitative method were then developed to the quantitative method questionnaires. Secondly, data were then collected by questionnaires to explore the needs of the academic services from participants' viewpoints and recommendations.

1. Qualitative Method

Criteria for participating in the focus group discussion or in-depth interview were 50 years old and above in the Andaman Triangle Provinces Cluster. The purpose was to explore PKRU's role in academic services for the complete aged society from the participants' viewpoint and the recommendation for the academic services for the older persons. The semi-structured interview guide had 21 open-ended questions which were developed by the researchers. All of the interviews were conducted both male and female. Before collecting data, the interview guide was evaluated by three experts in the elderly specialist.

1.1 Qualitative participants

Participants were recruited from the Andaman Triangle Provinces Cluster (Phuket, Krabi, and Phang Nga Province). Inclusion criteria were age 50 and above, willing to join the in-depth, one-on-one interview (middle old and oldest-old who could not leave their home) or the focus group, understood the purpose of the study, and provided written consent form. Sixty-five participants (20 males and 45 females) in the age range of 50 to 87 years were included in this study. The participants had a different occupation, with the majority of pensioners.

1.2 Qualitative data collection procedure

All in-depth interviews and focus discussions were conducted in the Southern language. Every interview lasted 30–60 minutes at the participants' home, or community office, and all interviews were recorded after consent.

1.3 Qualitative data analysis

The content from interviews was audio-recorded and transcribed verbatim. In-depth interviews and focus group transcripts were analyzed using content analysis.

2. Quantitative method

2.1 Quantitative design

Following the qualitative study, a descriptive quantitative study was used to investigate the needs of the academic service from PKRU for the complete aged society. Data were collected using a structured questionnaire which was developed from the results of the qualitative study.

2.2 Quantitative participants

Nine hundred and fifty-nine participants by Daniel formula were included in the quantitative study. Participants in each province were selected using a multistage sampling procedure. The sampling process involved a four-step scheme: (a) A sampling frame was set based on the 11 districts in three provinces, (b) Each district was divided into sub-district was created. There were randomly sampled from each district and a total of 34 sub-districts were included in this study, (c) Each sub-district was divided into the village. There were randomly sampled from each sub-district and a total of 66 villages were included in this study. (d) Participants were conveniently selected from each village. Inclusion criteria were Thai people whose aged 50 and above according to the definition of pre-aging of National Statistical Office (2016), living at home in the defined village area, and willing to answer the questionnaires (self-administered paper-and-pencil).

2.3 Quantitative measurement instrument

A structured questionnaire was developed based on the finding from the qualitative study. Before collecting data, the interview guide was evaluated by three experts in the elderly specialist. The questionnaire consisted of three parts. The first part of the participants' socio-demographic characteristics: gender, age, occupation, social role, marital status, medical history, fall history, the appropriate age for aging preparation. The second part investigated the participants' perception regarding academic services needs from PKRU. There had 5 dimensions of 65 items: knowledge for preparing to be the elderly (holistic health care and living in the digital age), empowering the families to care for the older persons, to develop occupational skills, teaching management, and setting up the activities for supporting aged society. The index of item-objective congruence (IOC) was 0.67–1.00 and has shown high consistency (Cronbach's alpha 0.97). The final part was an open questionnaire for participants' recommendations.

Academic services needs from PKRU scores ranging from the lowest score of 1 (strongly no needs) to the highest score of 5 (strongly needs). The average score can be interpreted as 4.21–5.00 refers to strongly needs, 3.41–4.20 refers to rather needs, 2.61–3.40 refers to moderate needs, 1.81–2.60 refers to rather no needs, and 1.00–1.80 refers to strongly no needs.

2.4 Quantitative data analysis

The results from questionnaires were analyzed with mean, standard deviation, one-way analysis of variance (ANOVA), and Scheffe's post hoc test.

Ethical considerations

Ethics approval was obtained from PKRU Research Ethics Committee No PKRU 2019–015. Participants gave their consent forms.

Results

Objective 1: PKRU's roles in the academic services for the complete aged society obtained from the participants' views

The results collected by semi-structured interviews 65 participants were mostly female (69.23%), pensioner, aged 60–69 years old (mean 65.72, SD = 8.61). The participants reflected nine categories of PKRU roles: to develop the better older persons' quality of life, to set up the older person services center, to develop the caring innovation for older persons, to establish the time bank, to train the community health care personnel, to provide the subject about older persons for undergraduate students, to provide the lifelong learning course for the older persons, to produce the self-care media for older persons and families, and to develop the new generation volunteers network for helping the older persons. Table 1 revealed the main and sub-categories of PKRU roles for the complete aged society.

Objective 2: The academic services' needs from PKRU for the complete aged society

Table 1. Summary of main and sub-categories of PKRU roles in academic services from participants' viewpoint.

Main categories	Subcategories	Contents
1. To develop a better quality of life for older persons	1.1 Preparation for aging	1) How to stay when retire? 2) How to be a burden-free older person? 3) Self-care (diet, exercise, mental and emotional care, fall prevention, chronic diseases care) 4) Financial management 5) Changing role after 60 years old 6) Digital literacy
	1.2 Empowering the families to care the older persons	Families training for family caregivers
	1.3 Health promotion in the elderly	Holistic health promotion
	1.4 To develop the occupational skills	Second occupation development
	1.5 Elder clubs/senior school	1) Recreation 2) Knowledge and experiences exchange
2. To set up the older person services center	Center for caring older persons	Independent organization from local governments
3. To develop the caring innovation for older persons	Develop innovation for daily living	Innovation for the activity of daily living
4. To establish the timebank	Accumulate time	Exchange accumulate time for caring for older persons
5. To train the community health care personnel	Community healthcare personnel for older persons	Short course for paid caregivers
6. Subject for undergraduate	General education	How to live with older persons?
7. Lifelong learning	Senior learning center	1) Short course 2) Online course
8. Media for older persons and families	Caring media for chronic diseases	Media about the geriatric syndromes
9. New generation volunteer network	New generation for older persons care network	Training a new generation for older persons care network

959 participants completed the surveys. The average age of the participants was 61.83 (SD = 10.39). Most of them were female (64.34%), married (69.03%), the main occupation was agriculture (23.88%), no medical illness (62.98%), and with good health status (48.28%). Participants had 5 needs from academic services as shown in the summary in [Table 2](#).

From [Table 2](#), when explored the detail of the top 5 of each need, namely:

Knowledge: physical care, mental care, digital literacy, and preparation for the complete aged society.

To train family caregivers for older persons: How to live with older persons? How to care for homebound and bedridden older persons and how to prepare food for older persons.

Second occupational development to generate additional older persons' income: tree planting, cooking, making arts – crafts and embroidery as a souvenir.

Subjects/course about older persons: to train paid caregivers to serve older persons, to teach general knowledge about older persons, older person course in the curriculum for the undergraduate students, and how to be active and healthy aging?

To advocate various activities for older persons, to educate special courses: management skills to run the community older persons-care center, to develop innovation to support their daily living, how to collaborate with other networks to create more activities for older persons, to create the media in various topics about older persons and to set up the elder club in the university.

Table 2. Mean and Standard deviation of participants' academic needs from PKRU.

Needs	M	SD	Level
Knowledge for preparing to be the elderly	3.53	0.52	Moderate
Training of family caregiver for older persons	3.69	0.65	More
Second occupation development	3.18	0.17	Moderate
Subject about elderly	3.55	0.82	Moderate
Promote activities for older persons	3.70	0.67	More

Table 3. Comparison of the mean academic services' needs from PKRU based on subjects' age group and occupation.

Variable	N(%)	Academic services' needs Mean \pm SD	F
Age			
50–59 y	442 (46.09)	3.70 \pm 0.70	6.462**
60–69 y	331 (34.52)	3.57 \pm 0.67	
70–79 y	118 (12.03)	3.52 \pm 0.55	
\geq 80 y	68 (7.36)		
Occupation			
Pensioners	96 (10.01)	3.72 \pm 0.59	4.005**
Trader	128 (13.35)	3.53 \pm 0.61	
Personal business	66 (6.88)	3.88 \pm 0.69	
Government official	44 (4.59)	3.84 \pm 1.06	
Contractor	164 (17.10)	3.51 \pm 0.66	
Agriculturalist	229 (23.88)	3.53 \pm 0.60	
Not working	210 (21.92)	3.64 \pm 0.68	
Other	22 (2.27)	3.64 \pm 0.66	

** $p < 0.01$

Moreover, Table 3, ANOVA showed that the mean academic services' needs from PKRU scores were significantly different in the participants with different ages ($p < .010$). According to Scheffe's post hoc test, the mean academic services needs from PKRU were significantly different in all age groups at $p < .01$. The participants whose age was less than 59 years old had the highest mean score than other age groups. ANOVA showed that the mean academic services needs from PKRU scores were significantly different in participants with occupation ($p < .010$). According to Scheffe's post hoc test, the mean academic services needs from PKRU were significantly different occupation at $p < .01$. The participants who were government officers had the highest mean score than other occupations.

Objective 3: The recommendations for the academic services for older persons

Participants recommendations to improve the university roles in the areas of academic services, namely:

(1) Community need assessment

As PKRU philosophy is to be the educational institution that operates with full responsibilities for social development, and one of the missions is to educate and encourage academic excellence and professionalism in the society, to serve the needs of the local community and society. Need assessment should be the first step for planning the activities or program to meet the older persons' needs.

"University has the community service, must be proactive by analyzing older persons' problems. What are their needs? need assessment for health promotion, disease prevention in older persons should be done. Then, the university releases the short training course".(Female participants, 58 years old)

(2) Holistic care

Caring for older persons, same as other age groups, needs holistic care and 4 dimensions of health care, namely: health promotion, prevention, curative, and rehabilitation. Moreover, PKRU should collaborate with other networks.

"Faculty that responsible for the older persons' well-being, mental health, traveling, being at home. What contents should prepare for the pre-aging group? Because caring for older persons is really hard work, university faculties like medical faculty, pharmacy faculty can contribute. Takes everything as holistic. Bring all sectors as a holistic" (Male participant, 62 years old).

(3) The preparation to care for older persons should be started from home

For caregivers' training, we should start with family members, then extend to others. This will lead to being more sustainable in the caring of older persons in the community. Because Thailand's long-term care is community-based too. Thus, the family caregiver will be the key person for caring for older persons at home and in the community.

"Prepare from family. If we prepare from family first, it flows. Must prepare the family members. If we prepare from the community, it is more difficult" (Male participant, 62 years old).

- (4) University should collaborate with local governments and sub-district health-promoting hospitals to train caregivers for the older persons

University is a good resource for knowledge. Besides, presently each local government employs 2 caregivers to care for the older persons in their community. In a public health setting, also train caregivers to care for those dependent older persons too, on a volunteer basis. Both of them must pass the long-term care course. If there is a collaboration between university and health care personnel in training the caregivers, it will be more fruitful.

"If we share the idea between university lectures, public health personnel, and local governments about the caregiver course, the atmosphere of learning will be more interesting. Because nowadays training lectures are only from the public health sector. If we join together. It will be more readily completed. Local government concerns only the nursing view, but in reality, there has another dimension for caring older persons". (Female participant, 60 years old)

- (5) University can be the coordination center in caring for older persons in the communities

With the challenge of the rapid increase of older persons, Phuket province should set up a coordination center for caring for those older persons. If there has an independent organization from the local government sector to operate, it will be more sustainable.

"The university should be the center of caring for older persons, to collaborate with different agencies. There should have one center which doesn't under the local governments. This organization provides comprehensive service. but the governments should support it. Otherwise, if the mayor doesn't concern about older person issues, older persons will not get the support. The independent organization should not be under the political, this will be the better way to run this job. Because it is not based on power and political voice. The university has many networks. Communities have many steps from the governor. Most of us misunderstand that older persons' issues are only health care sector responsibility, this is not true, it needs to be integrated with many sectors." (Female participant, 60 years old)

- (6) Second occupation development

The return to the labor force after 60 years old is an increasing phenomenon in Thailand. In 2018, the Thai older person population was still gainfully employed at 37%. Therefore, one of Thailand's strategies is to encourage the older person population to stay employed for as long as possible. Based on this strategy, PKRU can train new skills or strengthen existing skills for older persons. In some participants' view, the new skills should be a hobby that can lead to a career, light work, and simple work. That career is low investment and they will train with the happiness.

"train new skills are important for older persons who don't have enough money. It should not invest very high, but can help earn enough money. It is important to focus on training happily." (Female participant, 67 years old)

- (7) Senior school

The objectives of Thailand Senior school are to develop the elderly's quality of life and to promote occupations for older persons. Nowadays there are many senior schools in Thailand. This school can promote older persons to have more social activities. In participants' view, if PKRU has set up the senior school, the good times are either on Saturday or Sunday from 9.00 am to 12.00 pm. or during Monday to Friday.

“University may set up the senior school. It is better to set activities on Saturday or Sunday or during the day or Monday to Friday. Because their grandchildren go to school.”

(8) Tour arrangement for older persons

The active aging group still loves to travel. They feel fun and enjoy themselves with their friends. So they recommended that the university can organize the trip for older persons as a group of not more than 20 persons. Because older persons needed more help for looking after and preventing the possible accidents. Those who serve them must have the knowledge and skills to care for and understand them.

“Help to organize a tour program. Charge to stay one night, group size 20 people. If large group, it is difficult to arrange. If there had a place to travel, 2 nights is ok. Because to contract the tour by myself or booking the accommodation, it may be difficult for older persons.” (Female participant, 76 years old)

(9) Special service for older persons

Aside from academic services, participants suggested that universities may have special services for older persons, such as food delivery by preparing healthy food and charging that service. This service can support older persons who are inconvenient to get food for themselves. They will then have healthy food.

“This project should do, food service and delivery for the elderly. Making the tiffing box for the elderly. To provide the menu to choose from delivery service, charge from the elderly. This is good for those elderly who live alone or unable to get food or their grandchildren do not have time to prepare food.”(Female participant, 65 years old)

Discussion and conclusion

In the present study, the participants viewed that the PKRU roles in terms of academic services were to establish a short course or online course about older person preparation which covers holistic care. This is one of lifelong learning addressed by the Office of Higher Education Commission (2015, p. 115) that one of Thailand’s university roles was to provide academic services to the society. It was the main mission of higher education. Moreover, the Minister of the Ministry of Higher Education, Science, Research and Innovation has a policy for universities to adopt a lifelong learning institution by creating the curriculum to teach about the new perspective to be the active aging, for better skills, and quality of life (Laothamatas, 2020). These should include physical and mental health, how to live in a social media society, financial management, and empowering families to care for older persons. Because most of them often have underlying chronic diseases. In the earlier studies revealed that they had at least one chronic disease, however, most of them suffered from multimorbidity (Boeckxstaens et al., 2014; Afshar et al., 2015, p. 3; Zhang et al., 2018). Mental health, especially depression, is a major public health problem among older persons and has become the second leading cause of burden among the elderly (Cheruvu & Chiyaka, 2019). The participants also suggested that universities should train and up skills to promote extra income generation for older persons. Thailand National Statistic Office reported that 37% of older persons in 2019 still working (Prasartkun, 2019, pp. 6, 69). As the WHO active aging framework, one of the 3 pillars was security which included financial security (WHO, 2002, pp. 12–13). According to the digital age, the elderly need to have digital literacy such as being able to identify fake news, line, electronic banking, Facebook, use of electronic service through social media. Today’s social media has more positive effects than negative effects for older persons. They felt that social media improve their quality of daily life (Haris et al., 2014) cognitive function (Quinn, 2018), and knowledge of the global scenario (Kamalli et al., 2020, p. 1584).

Financial management is another important issue for older persons. Because they may not acquire a job or have enough money. Financial preparation is another social dimension that needs to be prepared at an earlier age to help them acquire self-reliant finances. Therefore, one of the universities' roles is to promote a second occupation for them (The Gerontological Society of America, 2019).

Moreover, PKRU should provide a training course for preparing caring skills for both home-bound and bedridden older persons as well as their family members. This demand depends on the severity of illness and personal risks. Family members may require comprehensive medical care. A previous study found that taking care of dependent family members changed family caregivers living which lead them to confront confusion, uncertainty, difficulty to balance their responsibilities (Moral-Fernandez et al., 2018). Therefore, family members need to acquire more knowledge and skills (Given et al., 2008, p. 115), the guidance, may help to decrease their burdens (Dixe, Teixeira, Frontini, Peralta, & Querido, 2019). With the rapid growth of global aging, this phenomenon should be supported by everyone in society. Therefore, everyone should know and understand about the complete aged society. For university, undergraduate students should know about this aspect too. The aging issue should then to integrate into the regular curriculum. Related to this, Tullo et al. (2016, p. 698) found that gaining an awareness of older persons' needs was important for university students.

PKRU may promote various activities for older persons such as establishing a senior club, collaborating with other organizations carried out activities, to set up the senior school, and the community elderly care center. In Thailand, the senior club is one of the government social welfare programs for older persons. This policy has been implemented in every sub-districts. The older persons can gather and enjoy various social activities at the senior clubs leading to improve the older persons' well-being. The frequency of attending the senior club was strongly related to their quality of life (Chaosuansreecharoen & Chaosuansreecharoen, 2016). The senior club aims nearly similar to the university of the third age (U₃A) in Europe. Hebestreit (2008, p. 547) mentioned that U₃A was an important means of enhancing older persons' quality of life. It has been supported the social and psychological benefits for older persons (Formosa, 2012, p. 114)

Nowadays, technology and innovation play important roles to help the older persons' daily living, make life easier and more convenient especially in caring the dependant or disabled older persons, consisting with Coll (2018, p. 218) which mention that, in the future, technology will play an increasingly important role in the delivery of healthcare for older persons. WHO had estimated that they need one or more assistant technologies for their living. These products can provide better health and well-being (WHO, 2016, p. 1). Universities had the potential to develop innovation and collaborate with the industrials. Because universities have many faculties and fields of study. Therefore, we expected that universities can create innovation to support older persons daily living.

Moreover, participants suggested that PKRU may support the caring of older persons by collaborating with local governments. Local collaboration in community health needs assessment can improve health outcomes (Isehunwa et al., 2020). Since the university is quite independent while the local governments, being decentralized, work closely with their citizens, they know their problems, needs, and have the local authorities and mandate to serve their communities. Besides, if possible, PKRU can incorporate a "time-bank" to support "long-term care" in the communities (Sasananan et al., 2019, pp. 9–10). This can help those vulnerable, disabled, isolated older persons to obtain better physical, social, and psychological health services from the healthcare volunteers as well as to facilitate the assistant seeking to promote trustworthiness in the community (Ng et al., 2020).

The present study found that there had two needs which participants rated at more level were promote activities for older persons and training of family caregiver for older persons respectively. In addition analysis, the results from ANOVA showed that the mean academic services' needs from PKRU scores were significantly different in subjects with different ages ($p < .010$) and different occupations at $p < .01$. Participants whose age was less than 59 years old had the highest mean score than other age groups and those who were government officers had the highest mean score than other occupations. As Solhi et al. (2020) found that middle-aged (45–59 years old) should prepare for physical, mental, social support, spiritual, and financial independence. In Thailand, the

preparation of the middle age for entering the aging was at a medium level. Most of them were lack of physical health preparation, annual physical checkups, knowledge, understanding in preparation for an aging society, especially financial planning (Onthaisomg et al., 2020, p. 53). The previous study also found that occupation ($r = .19$) and age ($r = .212$) related to preparation for aging in middle age. Someone who had an occupation needed to prepare for aging more than non-working. This research suggested that we should prepare for aging in the young (Chaisombut & Yana, 2019, pp. 139–140). Therefore, the preparation for the completed aged society should be based on age and occupations.

Universities have many roles for supporting the complete aged society based on academic services. PKRU academic services should extend to cover older persons both in the area of education and social activities according to the older persons' needs. The important thing is the collaboration with the local governments and other networks and based on PKRU expertise. Community-based and active participation and collaboration are the key success strategies for every area of sustainable development.

Disclosure statement

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