ACTIVITIES IN DAILY LIFE ASSESSMENT AMONG ELDERLY IN SALAYA SUB-DISTRICT MUNICIPALITY, NAKHON PATHOM PROVINCE, THAILAND

[1]WANVISA SAISANAN NA AYUDHAYA, [2]TANAWAT CHAIPHONGPACHARA, [3]WALLAPA WASSANASOMPONG1, [4]PUSSADEE LAOR

[1, 2, 3]College of Allied Health Sciences, Suan Sunandha Rajabhat University, Thailand
[4]School of Health Science, Mae Fah Luang University, Thailand
E-mail: [1]wanvisa.sa@ssru.ac.th, [2]tanawat.ch@ssru.ac.th, [3]wallapa.wa@ssru.ac.th, [4]pussadee.lao@mfu.ac.th

Abstract: The world, including Thailand with an aging population of more than 10%, is entering the aging society. As a result, dependence by the population of the elderly has also increased, meaning there is more need for help and care from others to live. This research aim to study the ability of elderly people to perform activities in daily life in the municipality of Salaya Sub-district, Nakhon Pathom Province, Thailand. The sampling included elderly in Salaya District Municipality. A total of 317 samples were given the Barthel Activities of Daily Living (ADL) Questionnaire. Descriptive statistics were used. The results showed that the Barthel ADL index, 93.7% were well elderly. The majority of activities that the elderly were unable to do involved going up and down stairs at 11.0%, followed by independent dressing at 5.7%. The recommendation from this research is that health care team members and caregivers have information that can be used as a guideline for the surveillance and follow-up of elderly dependents, with caregivers conducting monitoring. When the elderly are unable to do daily activities by themselves, the goal should be to support their health and quality of life.

Keywords: Activities in daily life (ADL), Elderly, Salaya Sub-district Municipality

I. INTRODUCTION

The National Statistics Office found that Thailand has a rapidly increasing proportion of elderly people. It increased to 14.9 % in 2014 and over the next 20 years will increase to 25 %, called "the elderly society". This brings about many social changes and a reduction in the viable labour force, which will affect the manufacturing sector and social services need. Workers and families will have to shoulder the burden of caring for the elderly. Social services, including the provision of social protection systems, may not be enough. Particularly, medical services due to diseases related to the elderly are trending upwards. Moreover, the cost of public health services and payment for retirement will be increasing in correlation with increased illness, disability and the inability for self-help by the elderly [1]. Health problems from old age are related to physical deterioration and affect social, economic, health and long-term care management [2]. The elderly have problems in three common chronic illnesses, namely hypertension, diabetes and heart disease. These diseases cause complications such as paralysis and amputation, causing older people to have more dependency [3]. Thai society has mostly unofficial care for the family, which is due to recessions in the ability of the family to care for members who rely on them. This is often the case for the disabled and elderly, meaning there is a tendency of failure in long-term care management for physical, mental, social, economic, and family factors [4]. The reality in Thai society discovered recently is that society does not give priority to the elderly. It has been found that many elderly people are abandoned [5].

Salaya Sub-district Municipality in Nakhon Pathom Province has an elderly population that is likely to increase moving forward. In 2007, the total population was 821,127 people, with an estimated 89,468 people (10.9%) aged over 60 years. There is no information for activities in daily life (ADL) of the elderly during that time.

This research studied the performance of daily activities and ability levels by the elderly in the municipality of Salaya Sub-district, Nakhon Pathom Province, Thailand.

II. MATERIALS AND METHODS

The populations were ≥ 60 years old. In the Salaya district municipality area. There are 1,525 villages in Nakhon Pathom province (February, 2017). Sample size was calculated by using the formula of Taro Yamane (1973) [6] by simple random sampling, confidence level of 95% representing the value in the formula. There were 317 samples, the samples were able to hear and were willing to cooperate to provide information in this research.

Research Instrument

A questionnaire was used an instrument for data collection. The questionnaire consisted of two deferent parts. In the

Part 1 Demographic characteristics; gender, age, underlying disease, religious, marital status and level of education.

Part 2 The Barthel Index of Activities of Daily Living (ADLs), measures functional disability by quantifying patient performance in 10 activities of daily life, consists of 10 items assessing the ability to achieve certain activities without assistance. It evaluates the ability of feeding, moving from wheelchair to bed and returning, doing personal toilet, getting on and off toilet, bathing self, walking on level surface, ascending and descending stairs, dressing, controlling bowels and controlling bladder).

There are total 20 scores and three levels groups of result translation as follows: Group1: 12-20 scores were physically independent but not necessary normal (well elder), Group2: 5-11 scores were mildly/moderately disabled (home bound elder), and Group3: 0-4 scores were very severity disabled (bed bound elder). [7] The reliability of this questionnaire by Cornbrash's alpha coefficient was 0.76.

Statistical Analysis

The study was analyzed by using the statistical package for the social sciences. Statistics were analyzed using descriptive statistics: frequency, percentage, mean and standard deviation.

Ethics committee

This study investigated the consent of the sample. Sample was selected a sample that meets the objectives of the research. Researchers apply for ethics for human research projects, consider and obtain a certificate of approval from the Research and Development Institute. Suan Sunandha Rajabhat University COA.1-029 / 2017

III. RESULTS

Demographic characteristics

According to the 317 respondents, the majority of respondents were female (77.0%). Most 56.5% of respondents were 60-69 years old, average age was 69.46 years old and standard division was 7.2, the minimum age was 60 years old and the maximum age was 94 years old. More than half of respondents had sufficient income. The minimum monthly income was 600 baht and the maximum monthly income was 25,000 baht. Nearby 83.9 % of respondents were had underlying disease. Majority of respondents were Buddhism (98.7%). More than half of respondents were married. Most 67.5% of respondents indicated that they had achieved a primary school and nearly 9.8 % of respondents who had not been educated as shown in Table 1.

TABLE 1: Demographic characteristics of participants (n=317)

Demographic characteristics	Frequency	Percentage
Gender		
Male	73	23.0
Female	244	77.0
Age (years old)		
60-69	179	56.5
70-79	114	36.0
≥ 80	24	7.6
Mean= 69.46 years, S.D. = 7.23, Min = 60 years , Max = 94 years		
Underlying Disease		
No	51	16.1
Yes	266	83.9
Religious		
Buddhist	313	98.7
Christ	4	1.3
Marital Status		
Single	18	5.7
Married	170	53.6
Widowed / divorced / separated	129	40.7
Education Level		
No education	31	9.8
Primary school	214	67.5
Secondary school	20	6.3
Bachelor degree	50	15.8
higher Bachelor degree	2	0.6

2. Activities in Daily Life

As shown in Table 2, the majority of respondents were able to eat any normal food 89.0%), followed by 10.7% of respondents were needs to help cutting or requires modified diet. However, respondents had unable to feeding by themselves (0.3%). Grooming item, most respondents were independent face/hair/teeth/shaving (92.7%), and 2.8% who were needs help with personal care. Transfer item, respondents who unable to sitting balance (1.9%), who needed major help to sit (10.4%), who needed minor help (14.2%) and who no needed personal care or independent (73.5%). Toilet use item, respondents who were unable to use toilet (3.5%), who were needed some help such as they can clean themself after using the toilet (11.0 %), and respondents who were independent (on and off, dressing, wiping) (85.5%). Mobility item, respondents who were not movement (1.6%), followed by who were used a wheelchair to movement (4.4%), respondents were walked or moved by helper to movement, such as support or tell to follow or need to pay attention to safety (13.6%) and nearby (80.4%) of respondents were walked and moved by themselves. Dressing ability item, nearby 5.7% of respondents were required personal care to wear clothes, 10.4% of respondents were needed someone to help but they can do about half unaided, and 82.4% of respondents who helped themself well (including pinstripes, zippers, or adapted garments). Stairs ability to climb down the ladder 1 step, the respondents were not done up stairs (11.0%), followed by respondents who were needed helpers (11.0%), and respondent who were climb to up stair by themselves (78.0%). Bathing ability, respondents were unable bathing by themselves or needed helpers (4.1%), and most of them were able to showers by themselves (95.9%). Bowels item, less than 1% of respondents were incontinent or needs enema from helper, and 8.5% of them were uncontrolled of bowels once a week, almost 90.5% of respondent were control of bowel in preceding week. Bladder item, we found that 0.6% of respondents were incontinent or catheterized and unable to manage, followed by 7.6% of respondents were uncontrolled bladder in maximum one per 24

hours, and most 91.8% of them were controlled bladder in preceding a week.

TABLE 2: Number and percentage of respondents classified by Barthel ADL Index (n=317)

	The Barthel ADL Index	Frequency	Percent
1.	Feeding		
	0. unable 1. needs help cutting, spreading butter, etc., or requires modified diet 2. independent	1 34 282	0.3 10.7 89.0
2.	Grooming		
	0. needs help with personal care 1. independent face/hair/teeth/shaving (implements provided)	9 308	2.8 97.2
3.	Transfer		
	0. unable – no sitting balance 1. major help (one or two people, physical), can sit 2. minor help (verbal or physical) 3. independent	6 33 45 233	1.9 10.4 14.2 73.5
4.	Toilet use		
	0. dependent 1. needs some help, but can do something alone 2. independent (on and off, dressing, wiping)	11 35 271	3.5 11.0 85.5
5.	Mobility		
	0. immobile 1. wheelchair independent, including corners, etc. 2. walks with help of one person (verbal or physical) 3. independent (but may use any aid, e.g., stick)	5 14 43 255	1.6 4.4 13.6 80.4
6.	Dressing		
	0. dependent 1. needs help, but can do about half unaided 2. independent (including buttons, zips, laces, etc.)	18 32 267	5.7 10.1 84.2
7.	Stairs		
	0. unable 1. needs help (verbal, physical, carrying aid) 2. independent up and down	35 35 247	11.0 11.0 78.0
8.	Bathing		
	0. unable 1. independent (or in shower)	13 304	4.1 95.9
9.	Bowels		
	0. incontinent (or needs to be given enemata) 1. occasional accident (once/week) 2. continent	3 27 287	1.0 8.5 90.5
10.	Bladder		
	0. incontinent, or catheterized and unable to manage 1. occasional accident (max. once per 24 hours) 2. continent (for over 7 days)	2 24 291	0.6 7.6 91.8

3. Classified Barthel Activities in Daily Life Index (Barthel ADL index)

The Barthel ADL index was classified into 3 groups; the first group was well elder, the second group was home bound elder, and third group was bed bound elder or unable. The score ranging was 12-20 scores, 5-11 scores and 0-4 scores, respectively. The result of this study, the respondents had 297 cases (93.7%) were well elder, followed by 15 cases (4.7%) were home bound elder, and 5 cases (5%) of respondents were bed bound elder as shown in Table 3.

TABLE 3: Classified Barthel ADL index (n=317)

Activities in Daily Life	Frequency	Percent
Group 1 well elder (12-2 scores)	297	93.7
Group 2 home bound elder (5 11 scores) needs help wit personal care	15	4.7
Group 3 bed bound elder (0- scores) unable	5	1.6

IV. DISCUSSION

This study indicates that 93.7% of the respondents were well elderly. 56.5% of them were 60-69 years old, though there was little physiological difference when compared to older people. They were able to take care of themselves when ill and do their daily activities by themselves. This related to a

previous study by Yamwong Nongnuch [8], who found that the elderly age group of 60-69 years old showed little physiological change. When faced with illness, they could take care of themselves and go to the hospital by themselves. Moreover, Prapaporn Jinanudaya [9] found that older subjects that had higher age levels needed people to care for them when sick, which made them feel like a burden on their family. When considering activities, the researcher found that the majority of activities that the elderly were unable to do involved going up and down stairs, followed by independent dressing. Previous study by Suvimol Petaburan and Kalaya Taecha [10] examined the ability of the elderly to perform daily activities and meet their own needs, which could help the elderly in the municipality of Wiang Sub-district, Mueang District, Prae Province, Thailand. They found that the majority of the elderly were unable to climb a ladder (4.4%), followed by not being able to bath by themselves (3.4%). Furthermore, previous study showed that the elderly were needs for health care services of home health care and assistance for going to restroom. [11] These results could be used to support policy formulation and the planning of public health and social resources as well as developing the right service model with the ability to practice the daily routine of the elderly.

CONCLUSION

According to the results of this study, approximately 93.7% of respondents were able to help themselves. In the future, self-management skills such as the preparation for admission of the elderly should be increased. Both physical and mental can enhance self-care performance in controlling the risk factors that lead to chronic illnesses. In addition, the results of this study can be supported by previous researches. Also, surveillance and follow-up of elderly dependents should be monitored by caregivers. When elderly people are unable to do daily activities by themselves, the goal should be to support their health and quality of life.

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