CHAPTER V

RESULT OF THE STUDY

During the study period. There were 162 elderly living in Thamprakorn home for the age. None refused to participate in this study, and only one of them was excluded because of severe hearing loss. There for one hundred and sixty one elderly subjects were recruit and interviewed. The mean of age and its standard deviation of the population study were 76.6 and 8.6 years respectively. The duration of staying in Thamprakorn home ranged from 1 month to 26 years and its mean and standard deviation were 6.5 and 13.9 respectively. The number of people was 81 (50.3%) for male and 80 (49.7) for female. Most of them were Buddhists (98.1 %), the rest were Christians (1.2 %) and Islams (0.6 %), 16.8 % of them were single, 8.1 % were married, 68.9 % were widow and 6.2 % were divorce.

More than half of them were illiterate (52.8 %), Most of the elderly who were literate studied only prathom 1-4. However, the percentage of the elderly who could read, write and count were 55.9 %, 51.6 % and 70.8 % orderly. For their last job, 37.9% of them were labors, 26.1 % were hirelings and 21.7 % were merchants.

Table 5.1. Demographic and socioeconomic characteristics of the elderly in Thamprakorn Home.

variables	number	percent	mean	sd
age			76.6	8.6
60-64	7	4.3		
65-69	37	23.0		
70-74	25	15.5		
75-79	29	18		
80-84	28	17.4		
85-up	35	21.7		
duration of stay (yrs)			6.5	13.9
male	81	50.3	* 75.40	7.6
female	80	49.7	* 77.95	9.3
Religion				
Buddhist	158	98.1		
Christian	2	1.2		
Islam	1	0.6		
Marital status				
single	27	16.8		
married	13	8.1		
widow	111	68.9		
divorce	10	6.2		
Education				
illiteracy	85	52.8		
prathom 1-4	62	38.5		
secondary school	14	8.7		
can read	90	55.9		
can write	83	51.6		
counting	114	70.8		
Work				
office	11	6.8		
labour	61	37.9		
hireling	42	26.1		
merchant	35	21.7		
others	12	7.5		

* age

Although the total number of male was nearly equal to female, the proportion of male was different among age groups. The highest percentage of male was 70 % in the age group of 65-69, and the lowest was 14 % in the age group of 60-64. After the age of 70, the ratio of male to female declined as in the age measured. (table 5.2).

Table 5.2. The percentage of sex in elderly with age groups.

age group	male		female	
	number	percent	number	percent
60-64	1	14.3	6	85.7
65-69	26	70.3	11	29.7
70-74	14	56.0	11	44.0
75-79	13	44.8	16	55.2
80-84	10	35.7	18	64.3
85+	17	48.6	18	51.4

64.6 % of the subject were non smokers. 39.9 % were smokers and still continuous the habit during the period of study. 20.5 % were ex-smokers. Nearly 90 % were non drinkers and only 2.5 % drunk alcohol everyday. For their health perception, 64.6 % of them perceived that their health status was accepted. 13 % perceived that their health was good, 22.4 % perceived that they were in bad health. For vision, 30.4 % of them had no problem, more than half of them can not see clearly (63.8 %), 1.2 % of them were blind. For hearing, 65.8 % of them had no problem, 33.5 % had some hearing problem and 0.6 % were deafness. For their overall general health, more than half of them (71.4 %) still do exercise. However 80.7 % could not do brisk walk. Most of them were non assisted device user (73.3 %), 19.3 % used cane and 6.8% used walker, only one used wheelchair (table 5.3).

Table 5.3. The percentage of general health, health perception and health behaviors in aging.

variables	number	percentage
smoking		
no	75	46.6
yes	53	32.9
used to smoke	33	20.5
drinking		
no	143	88.8
yes	4	2.5
sometimes	14	8.7
health perception		
bad	36	22.4
accept	104	64.6
good	21	13.0
vision		
no problem	49	30.4
not very clear	110	63.8
blind	2	1.2
hearing		
no problem	106	65.8
speak louder	54	33.5
deafness	1	0.6
quickwalk		
cannot	130	80.7
can	31	19.3
exercise		
no	46	28.6
yes	115	71.4
using assisted device		
no	118	73.3
cane	31	19.3
crutch	-	-
walker	11	6.8
wheel chair	1	0.6

Table 5.4 showed the distribution of the disease, 70.8 % of the elderly subjects reported that they had one or more diseases. Commonly reported disease were osteoarthritis (35.4 %), hemiparesis (10 %), hypertension (9.3 %), heart disease (7.5 %), asthma (5 %), tuberculosis (1.2 %), gout (1.9 %), diabetes (1.2 %), and kidney diseases (0.6 %).

Table 5.4. The distribution of diseases in elderly Thamprakorn Home.

disease	number	percent
diabetes	2	1.2
hypertension	15	9.3
asthma	8	5.0
osteoarthritis	57	35.4
gout	3	1.9
heart disease	12	7.5
kidney disease	1	0.6
tuberculosis	2	1.2
hemiparesis	16	9.9
others	27	16.8

Table 5.5 showed percentage of distribution of disable in each activity. 15 for basic activities of daily living and 7 for instrumental activities of daily living. It showed that most of the elderly in this home care were independent in BADL. BADL which had the lowest percentage of independent (67 %) was walking in door. Other BADL related to mobility ability were also shown to had low percentage of independence. (moving from bed to chair, sit to stand, go to toilet)

The percentage of independence in IADL were low compared to those in BADL. (table 5.5.1). The elderly were dependent mostly in area reflected to mobility function such as stairs climbing, walking out door and using transportation.

According to the severity of the disability, the importance and difficulty of each activity were difference. The proportion of functional disability will be the sum of the number of the items that the elderly reported of being independence, need supervision, need assistance, or dependence for each activity.

Table 5.6 showed that 55.3 % of the elderly were fully independent in 15 items in BADL and .6 % was dependent in all items of BADL.

As we known, IADL are more complexes and difficult with the task necessary to function in social life. The result is showed in table 5.7. The percentage of dependence was higher than that of BADL. 31.1 % were fully independent in IADL.

Table 5.5 The percentage of level of disable activities in BADL.

	bed mobility	bed to chair	sit to stand	walk in door	go to toilet	bladder control	bowel control	clean organ	bathing	dress upper	dress lower	wash face	grooming	comb hair	eat and drink
Ind.	92.6	89.4	88.8	67.1	80.7	78.3	83.9	95.0	92.5	93.8	94.4	97.5	99.4	98.8	98.8
NS.	6.8	7.5	6.8	28.0	14.3	3.1	3.1	3.1	6.2	5.6	5.6	2.5	.6	1.2	1.2
NA.	0.6	1.2	1.2	.6	1.9	11.8	7.5	1.9	1.9	1.2	.6	.6	-	-	-
Dep.	-	1.9	3.1	4.3	3.1	6.8	5.6	-	-	-	3.1	-	-	3.1	-

Ind.= independence
NS. = need supervision
NA. = need assistance
Dep.= dependence

Tabel5.5.1 The percentage of level of disable activities in IADL.

Level	up&down stair	walk out door	take medicine	light house work	wash clothes	finance	transport
Independence	42.2	62.7	96.9	82.0	47.8	98.1	49.7
Need supervision	45.3	29.8	3.1	16.1	17.4	.6	16.8
Need assistance	3.7	.6	-	1.2	2.5	1.	9.9
Dependence	8.7	6.8	-	.6	32.3	-	23.6

Table 5.6 The pecentage of limitation in BADL (15 items).

		number of limitation items														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Dep	88.8	5.0	3.1	1.2	.6	-	1.2	-	-	-	-	-	-	-	-	-
NA	83.9	6.8	8.1	.6	-	-	.6	-	-	-	-	-	-	-	-	-
NS	65.8	11.2	11.2	5.0	.6	.6	2.5	1.2	.6	-	.6	.6	-	-	-	-
Ind	.6	-	-	-	.6	.6	1.2	1.9	-	2.5	1.9	4.3	8.1	11.8	11.2	55.

Table 5.7 The precentage of limitation in IADL (7 items).

	Number of limitation items							
	0	1	2	3	4	5	6	7
Dep.	55.3	26.11	13.0	3.1	1.9	.6	-	-
NA.	82	16.8	1.2	-	-	-	-	-
NS.	41.0	14.9	23.6	14.9	5.6	-	-	-
Ind.	.6	.6	11.2	20.5	14.3	9.9	11.8	31.1

For the scale of convenience, the scale of severity of each ADL were categorize to be dependent (dependence, need assistance,need supervision) and independence.

The percentage of dependence in BADL and IADL were 27 % and 73.3 %. For IADL, 69 % was dependent and 31 % was independent. The dependence in IADL was higher than in BADL (69 % compared to 27%).

Table 5.8 The percentage of severity of disability rated as dependence and independence of BADL and IADL.

Type of disability	BADL	IADL
Dependent	72 (44.7 %)	111 (68.9 %)
Independent	89 (55.3 %)	50 (31.1 %)

Table 5.9 showed the rate of dependence and independence in BADL and IADL by age. The dependent rates of both BADL and IADL increased with age.

Table 5.9 The percentage of independence in BADL and IADL by age and sex.

AGE GROUP	BADL		IADL	
	male (%)	female (%)	male (%)	female (%)
60-64	-	-	-	2 (33.3)
65-69	8 (30.8)	3 (27.3)	13 (50.0)	4 (36.4)
70-74	2 (14.3)	3 (27.3)	6 (42.9)	6 (54.5)
75-79	4 (30.8)	1 (6.3)	13 (100)	11 (68.8)
80-84	6 (60.4)	5 (27.8)	25 (89.3)	16 (88.9)
85+	8 (47.1)	3 (16.7)	31 (88.6)	14 (77.8)

The mean of Geriatric Depression Scale and its standard deviation were 11.4 and 12.3 respectively. The mean of Abbreviate Mental Test score and its standard deviation were 8.8 and 14.6 respectively. Mean of social function scores and its standard deviation were 13.7 and 5.4 respectively.

Table 5.10. The mean, standard deviation, range of depression social function, mental function scores.

variable	Mean	Std. Dev.	Min	Max
depression	11.44	12.29	5	14
mental function	8.83	14.59	1	10
social function	13.68	5.44	8	20

For further analysis, was done to identify univariate factor of disability rated as dependent and independent of the elderly subjects.

Univariate factors identified as having p-value less than 0.5 of the BADL were sex,health perceive, using assisted device, having diseases and hemiplegia. (table 15.12)

Table 5.11. Factors associated with dependence in BADL.

variable	p-value
sex	.04
health perceive	.02
assisted device	.00
disease	.05
hemiplegia	.01

Univariate factors of the IADL were age, length of stay, social factor, depression, read, literacy, quickwalk, using assisted device, diseases, osteoarthritis and hemiplegia. (table 5.13, 5.14)

Table 5.12. Compare the difference between independence and dependence in IADL with age, duration of staying, depression, mental and social function.

variable	Dependence		Independence		p-value
	mean	SE	mean	SE	
age	71.8	1.1	78.85	.8	.000
length of stay	3.9	.8	7.6	1.5	.037
social function	14.72	.5	13.2	.6	.039
depression (GDS)	9.4	.3	12.4	1.4	.044

Table 5.13. Factors associated with dependence in IADL.

variable	p-value
read	.04
literacy	.04
quickwalk	.00
assisted device	.00
disease	.03
osteoarthritis	.03
hemiplegia	.05

The logistic regression analysis indicates that there were 4 factors which had statistically significant relation ($p < 0.05$) with dependence in BADL. Hemiparesis was the most importance factor in affecting the probability of dependence in BADL, followed by using assisted device, health perception and sex.

Table 5.14. Predicted the factors that influence functional disability in BADL

variable	B	SE B	p-value	Exp (B)
hemiplegia	1.41	.58	.01	4.23
sex	-1.00	.41	.01	.37
health perceive	1.03	.44	.02	2.82
assissted device	1.26	.40	.00	3.55
constant	-1.43	.32	.00	

B = Coefficient
SE B = Standard error of Coefficient

For IADL, there were 2 factors influencing the probability of disability (dependent in IADL). Osteoarthritis was the most important factor (odd ratio 4.5), followed by using assisted device.

Table 5.15. Predicted the factors that influence functional disability IADL

variable	B	SE B	p-value	Exp (B)
osteoarthritis	1.50	.44	.00	4.49
assisted device	1.49	.57	.00	4.42
constant	- .65	.38	.08	

B = Coefficient
SE B = Standard error of Coefficient

After deleting two factors from the multiple regression analysis confound the disability (using assisted device and quickwalk), there were 3 factors left in the model. (table 5.17) Hemiplegia was the most important factor in affecting the probability of dependence in BADL, followed by health perception and sex.

Table 5.16. **Predicted factors influence functional disability BADL.**

variable	B	SE B	p-value	Exp (B)
hemiplegia	1.69	.58	.00	5.43
sex	-1.01	.40	.01	.36
health perceive	1.08	.43	.01	2.95
constant	-1.05	.27	.00	

B = Coefficient
SE B = Standard error of Coefficient

After deleting using assisted device for IADL. Only disease were left in the equation. (table 18) in IADL.

Table 5.17. **Predicted factors influence functional disability IADL.**

variable	B	SE B	p-value	Exp (B)
disease	.86	.36	.02	2.37
constant	.21	.29	.47	

B = Coefficient
SE B = Standard error of Coefficient