

FACTORS PREDICTING ACTIVITIES OF DAILY LIVING AMONG STROKE PATIENTS IN BANGKOK METROPOLITAN

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ABSTRACT

Background/ Objective : Stroke is a major public health problem worldwide because of its prevalence and burden on quality of life and disability of the survivors. This descriptive study aimed to examine factors predicting living (ADL) of stroke patients who lived in Bangkok.

Method : Data was collected from 117 stroke patients at their houses, by using an interview method.

Result : More than half were males (56.4%) with an average age of 65.31 (SD=12.14) years, and 58.1% had completed primary school. The duration of stroke was 3 to 17 months and 91.5% of the subjects had chronic diseases. Hypertension and stiffness were the most common chronic diseases and complications. The results from logistic regression showed a relatively strong effect of sex and initial Barthel index (BI) on ADL status ($OR_{adj} = 3.93\%$, 95% CI 1.22-12.70, and $OR_{adj} = 9.67$, 95% CI 1.57-59.3, respectively). Males had about 3.9 times better ADL status, compared with females. Those who had a high (BI) score (50-70) had about 9.7 times better ADL status than those who had a low BI score (0-45). In addition, inverse effects on ADL status were found for chronic diseases ($OR_{adj} = 0.06$, 95% CI 0.007-0.64), complications ($OR_{adj} = 0.15$, CI 0.05-0.46), and caregiving demand ($OR_{adj} = 0.17$, CI 0.06-0.51).

Conclusions : The results support focusing intervention on promotion patients' activities of daily living particularly for those who are female and have chronic diseases. The needs of stroke patient should be assessed and supported continuously. Home visits are recommended to reduce complications and caregiving demands for stroke patients who live in Bangkok.

Keywords : Recovery; Stroke; Factors; Activities of Daily Living

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Table 1 Relationship between demographic characteristics, chronic diseases, complication, Initial Barthel index, depression, social support, patient-caregiver relationship, caregiving demand, and Activity of Daily Living Status.

Variables	Activity of Daily Living Status		χ^2 (p-value)
	(BI \geq 75)	(BI < 75)	
Demographic characteristics			
-Gender			
Male	32 (27.4)	34 (29.1)	6.43 (0.01)
Female	13 (11.1)	38 (32.5)	
-Age (year)			
\leq 60	19 (16.2)	22 (18.8)	1.66 (0.198)
> 60	26 (22.2)	50 (42.7)	
-Education Level			
Primary School	27 (23.1)	41 (35.0)	0.18 (0.912)
Secondary	14 (12.0)	23 (19.7)	
No	4 (3.4)	8 (6.8)	
Chronic disease			
Yes	37 (31.6)	70 (59.8)	7.97 (0.005)
No	8 (6.8)	2 (1.7)	
Complication			
yes	11 (9.4)	46 (39.3)	17.25 (0.001)
No	34 (29.1)	26 (22.2)	
Initial Barthel Index			
0-45	29 (24.8)	69 (59.0)	20.059 (0.001)
50-70	16 (13.7)	3 (2.6)	
Depression			
yes	9 (7.7)	24 (20.5)	2.431 (0.119)
No	36 (30.8)	48 (41.0)	

Table 1 Relationship between demographic characteristics, chronic diseases, complication, Initial Barthel index, depression, social support, patient-caregiver relationship, caregiving demand, and Activity of Daily Living Status.

(Cont.)

Variable	Activity of Daily Living Status		χ^2 (p-value)
	(BI \geq 75)	(BI < 75)	
Social support			
high	40 (34.2)	61 (52.1)	0.41 (0.523)
low	5 (4.3)	11 (9.4)	
Patient - caregiver relationship			
high	40 (34.2)	69 (59.0)	2.10 (0.148)
low	5 (4.3)	3 (2.6)	
Caregiving demand			
high	9 (7.7)	44 (37.6)	18.89 (0.001)
low	36 (30.8)	28 (23.9)	

Table 2 Multiple logistic regression analysis between independent variable and dependent variable.

Variables	B	S.E.	Sig	Adjusted OR	95% C.I.	
					Lower	Upper
Gender	1.371	.598	.022	3.938	1.220	12.705
Complication	-1.913	.574	.001	0.148	0.048	0.455
Chronic disease	-2.698	1.152	.019	0.067	0.007	0.643
Initial Barthel Index	2.270	.925	.014	9.676	1.578	59.336
Caregiving demand	-1.743	.546	.001	0.175	0.060	0.510
Constant	1.639	1.940	.398	5.151		

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