Behavior Factors Related to Recurrent Stroke*

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ABSTRACT

Cerebrovascular Disease (Stroke) is found that for every 15 million patients with Stroke around the world, 5,712,240, or 8.6% were death. It has been estimated that 23 million people around the world will be death from Stroke in 2030 and It is found that at least 1 in every 4 survival will face stroke recurrent for 14% during first year period, and increase to 25% in the fifth year This Case-control study aimed to study the behavior factors affecting the recurrent stroke among the stroke patient. 220 stroke patients at 35-80 years old included 110 recurrent stroke patients as a case group and 110 post stroke patients as a control group. A structured interview questionnaire was applied for data collecting process data was analyzed using Chi-Square test and Stepwise Multiple Logistic Regression.

The study revealed the statistically significant behavior factors related to recurrent stroke (p-value < 0.05) were low dietary control (OR = 4.79, 95 % CI = 1.98-11.54), sedentary behavior (OR = 4.23 ,95%CI = 1.00 -20.41) and discontinue follow up. (OR = 2.16 , 95 % CI = 1.01-4.59). Stepwise multiple logistic regression analysis revealed that low dietary control, and sedentary behavior were statistically significant, predicting recurrent stroke by 11.3%.

Public health nurse and the organizations should cooperate in organizing events low dietary control and sedentary behavior for stroke patients to prevent recurrent stroke.

Keywords: Recurrent Stroke, Behaviors, Health Behavior Factors

Table 1 Number, percentage, mean, and standard deviation of the sample personal factors
(n = 220)

Personal Factors	Cases (110คน)		Controls (110คน)	
	n	%	n	%
Sex				
Male	65	59.1	66	60.0
Female	45	40.9	44	40.0
Age				
35-45	12	10.9	13	11.9
46-59	48	43.6	47	42.7
60-70	38	34.6	38	34.5
71-79	12	10.9	12	10.9
	Min = 35 , Max = 80, Median = 59.5		Min = 36 , Max = 79, Median = 56.0	
Job				
Not working	55	50.0	50	45.2
Farmer	33	30.0	36	32.2
Official/State enterprise	1	0.9	1	0.9
Trade	15	13.6	1213	11.7
Hire and Employees	6	5.50	11	10.0
Period stroke				
<1 ปี	12	11.0	13	11.8
1-5 ปี	91	82.7	90	81.8
>5 ปี	7	6.3	7	6.4
	Min = 1 , Max = 10, Median = 2		Min = 1 , Max = 10, Median = 2	

Table 2 Behavioral factors related to recurrent Stroke (n=220)

| Behavioral Factors | Stroke | | χ^2 | p-value | Odds ratio | 95% CI | |
	Cases N (%)	Controls N (%)				Lower	Upper
Dietary control							
Low level	27 (79.4)	7 (20.6)	13.91	<0.00***	4.79	1.98	11.54
Medium-High level	83 (44.6)	103 (55.4)			1		
Takeing medicine							
Low level	10 (71.4)	4 (28.6)	-	0.09	2.65	0.80	8.72
Medium-High level	100 (48.5)	106 (51.5)			1		
Sedentary							
Low level	8 (80)	2 (20)	3.77	0.05*	4.23	1.0	20.41
Medium-High level	102 (48.6)	108 (51.4)			1		
Follow up							
Low level	23 (65.7)	12(34.3)	4.11	0.04*	2.16	1.01	4.59
Medium-High level	87 (47)	98 (53)			1		
Drinking and Smoking							
Low level	1 (33.3)	2 (66.7)	-	0.5[f]	0.49	0.04	5.54
Medium-High level	109(50.2)	108 (49.8)			1		

* <0.05, **<0.01, ***<0.001, [f] Fisher' s Exact Test

Table 3 Multiple Logistic regression with behavioral factors related to recurrent Stroke (n=220)

| Factors | Beta | p-value | Adjusted OR | 95% CI | |
				Lower	Upper
Low in dietary control	1.60	<0.001	4.98	2.06	12.07
Sedentary	1.57	0.05	4.81	1.00	23.57

Constant = -0.28, Pseudo R Square = 0.113

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