

Relationships between ADL, depression, and quality of life in stroke patients participating in a discharge community linkage program.

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Background

The Ministry of Health and Welfare is conducting a discharge community linkage program for stroke patients. This study was conducted on patients who participated in a “discharge community linkage program.”

Inability to perform activities of daily living (ADL) due to stroke leads to a decrease in the quality of life and depression, which can negatively affect a patient's independency. We aimed to identify the association between ADL, depression, and quality of life in patients who had a stroke.

Methods

We included 67 patients with a stroke, who had visited general hospitals in Seoul from March to December 2022, in our cross-sectional study. The general patient characteristics, ADL, health-related quality of life (using EQ-5D), and depression (using PHQ-4) were evaluated. Data were analyzed using independent t-test, ANOVA, and Pearson's correlation analysis. Regression analysis was performed to identify factors affecting the quality of life.

Results

The average EQ-5D, ADL, and PHQ-4 scores were 0.75 ± 0.12 , 8.94 ± 2.82 , and 3.55 ± 3.54 points, respectively.

There was a statistically significant difference in the health-related quality of life in terms of demographic and sociological characteristics such as housing type ($t=2.50$, $p<0.015$).

#. Correlation between ADL, QOL and Depression

Additionally, there was a significant negative correlation between ADL and quality of life ($r=-0.59$, $p<0.001$). Quality of life and depression showed a negative correlation ($r=-0.41$, $p<0.001$). (Figure 1)

#. Factors affecting QOL

Living alone ($\beta = -0.31$, $p=0.003$), ADL ($\beta = -0.58$, $p=0.001$), and depression ($\beta = -0.14$, $p=0.024$) significantly affected the quality of life ($F=6.26$, $p<0.001$, $R^2=0.50$). (Table 1)

Conclusion

The level of depression and ADL in patients with stroke were related to the quality of life. Therefore, “discharge community linkage program for stroke patients” should also involve interventions to improve depression and activities of daily living (ADL). And especially for patients living alone, more intervention is needed.

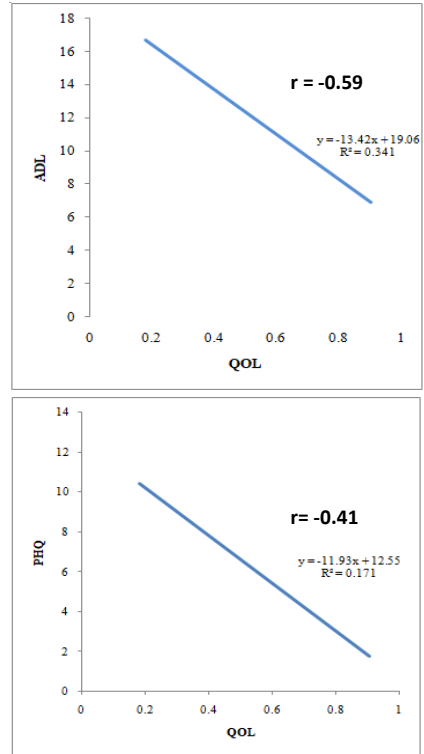


Figure 1. Correlation between ADL, QOL and Depression

Variables	B	SE	β	t	p
Constant	1.336	0.153		8.713	<0.001
Age	-0.001	0.001	-0.113	-0.962	0.340
Underlying disease	-0.007	0.008	-0.089	-0.898	0.373
Spouse	-0.022	0.033	-0.070	-0.676	0.502
Living arrangement	-0.076	0.025	-0.309	-3.081	0.003
Smoking	-0.043	0.027	-0.174	-1.576	0.121
Drinking alcohol	0.019	0.028	0.073	0.668	0.507
ADL	-0.025	0.005	-0.575	-4.842	<0.001
Depression	-0.005	0.004	-0.137	-1.191	0.024

adjusted $R^2=0.497$, $F=6.259$, $p<0.001$

Table 1. Factors affecting QOL