Physical Disability and Self-Concept of Stroke Patients in the Budhi Asih Hospital, Indonesia

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Abstract

Background: Disability can affect a patient’s psychological aspect including self-concept. Stroke is the primary cause of long-term disability worldwide.

Objective: The study investigated the relationship of physical disability and self-concept in stroke patients.

Method: Twenty-five stroke patients meeting the inclusion criteria were selected by total sampling at Budhi Asih Hospital and assessed with the Barthel Index and Robson self-Concept Questionnaire.

Result: Most stroke patients had a negative self-concept, but no significant association of physical disability and self-concept was found ($p = 0.142$).

Conclusion: The quality of nursing treatment for stroke patients would be increased by focusing not only on their physical condition but also their psychological aspect.

Keywords: Physical disability, self-concept, stroke

Introduction

The sudden disruption of the blood supply to a part of the brain that occurs during a stroke results in loss of function, disability, or even death. Stroke continues to be a leading cause of long-term disability worldwide and has a significant health burden.

Disabilities include limits or restrictions of participation in various activities as a result of either mental or physical impairment resulting from injury or illness. The severity of the disability that occurs in stroke patients is determined by the location of the lesion or obstruction, the extent of the area of inadequate perfusion, and the amount of collateral blood flow.

Stroke or disease can affect self-concept, a psychological perception of self that affects the relationships with others. A positive concept results from adaptive responses to one or more stressors; a negative self-concept results from maladaptive responses. The results of two previous studies in stroke patients are inconsistent, with one reporting a positive, and the other a negative, self-concept. Whereas the detection and treatment of negative self-concept in stroke patients is very important, as in the acute phase, negative self-concept will contribute to depression that can worsen the patient’s health condition and functional outcome. This study of the relationship of physical disability and self-concept is the first to be conducted at this institution. The aim is to be a reference for the early assessment of self-concept of every stroke patient, which is important to prevent the worsening of the condition of future stroke patients.

Method

This cross-sectional study enrolled 25 stroke patients at Budhi Asih Hospital who meet the inclusion criteria and agreed to participate. Physical disability was assessed by Barthel’s Index and Modified Rankin Scale. Self-concept was assessed during the acute phase with the Robson Self-Concept Questionnaire. The data was collected and analyzed with the Statistical Package for Social Sciences.
Results

Table 1. Physical Disability and Self-Concept of the Study Participants

<table>
<thead>
<tr>
<th>Physical Disability</th>
<th>Self-Concept</th>
<th>Total</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>N %</td>
<td>Negative</td>
</tr>
<tr>
<td>Low Disability</td>
<td>4</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Mild-severe disability</td>
<td>2</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>36%</td>
<td></td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td>28%</td>
<td></td>
<td>72%</td>
</tr>
</tbody>
</table>

As shown in Table 1, nine of the 25 participants (36%) had low disability and 16 (64%) had mild-severe disability. Nineteen (88%) had Fisher’s exact test did not find a significant association of disability and self-concept (p = 0.142).

Discussion

Physical disability
The finding of 36% of respondents with low disability and 64% with mild-severe disability is consistent with a previous study that reported 55.8% of acute-phase stroke patients with mild-severe disability. Another study reported mild-severe Barthel’s Index disability scores in 31.29% to 40.41% of stroke patients. The data in this study differs from done in Purwokerto, Indonesia in which the majority of stroke patients had low (32.3%) or mild disability (29%). The different result from the previous studies might happened because the data from each study is collected from different phase of stroke. The study in Purwokerto included patients in the rehabilitation phase. This study and others done in Jakarta and in Leeds and Bradford Teaching Hospital were performed in the acute phase on days 1 and 7 of hospital treatment. In the acute phase, disability will be high because the ability of patient is restricted by incomplete treatment and medical interventions such as infusion and catheterization.

Self-concept
Nineteen participants (76%) had a negative self-concept; six (24%) had a positive self-concept. This result is consistent with that of a previous study that reported 69.4% of stroke patients had mild disability and 83.3% had a negative self-concept. Another study found that significantly more acute-phase stroke patients had a negative self-concept than control participants of the same age and education. This study differs from a previous one conducted in Sumedang Hospital that reported a majority (53.33%) of stroke patients with a positive self-concept. The difference may have been the result of a low-level stroke burden in the Sumedang patients that affected their self-concept.

Relationship of Physical Disability and Self-Concept
In this study, five participants (20%) with low disability scores and 14 (58%) with mild-severe disability level had a negative self-concept. Regardless of their level of disability, the stroke patients were likely to have a negative self-concept. The statistical analysis found no relationship between physical disability and self-concept (p = 0.142). The highest self-concept score in this study was 167, but a patient with severe disability had a self-concept score of 137, which was almost a positive rating. The result is in line with a lack of association of disability and self-concept.

The lack of a relationship between disability and self-concept, may occur because people have different responses, or coping skills, that would give differing results triggered by the same stressor. People who have adaptive coping mechanisms would be able to make positive responses to stressors. Those with maladaptive coping mechanisms would not. Stroke patients with severe disabilities and adaptive coping mechanisms would have a positive self-concept. But, when stroke patients have low level of disability and their coping mechanism is maladaptive, their self-concept will be negative.

This study differs from previous investigations of physical disability and self-concept. A study conducted in a home for the elderly in Taiwan found a relationship between ability to perform daily activities and self-concept (p = 0.5). A study conducted by the National Stroke Hospital Bukittinggi found a relationship between functional outcome and self-concept of stroke patients. The Purwokerto study also found a relationship between self-concept and self-esteem. Those three studies all found that disease or disability did have an effect on self-concept. The results of the three could have differed because the population targeted in each study was different.

Other studies investigated the patient factors that affect self-concept. A study at the RSU PKU Muhammadiyah Yogyakarta hospital found a relationship between knowledge level and self-concept in stroke patients. There may also be relationships of social support, and family support with self-concept. Physical disability is thus not the only factor that caused the majority of stroke patients to have a negative self-concept. Negative self-concept may have but been a general response to illness and stroke as major stressors.

Conclusion
Physical disability and self-concept were not related. The majority of stroke patients had a negative self-concept. Stroke patients may have a negative self-concept regardless of the severity of their illness-related physical disability. The quality of acute care of stroke patients must be increased in order to treat not...
References


