



A Concept Analysis of Resilience Among Stroke Patients

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Abstract. Stroke can happen to anyone regardless of age, it can happen repeatedly or just happen to everyone. Stroke is the number one cause of disability. Every stroke sufferer has different stages in achieving recovery. Individuals adapt to survive and can rise again to continue life. This resilience concept analysis was carried out on articles published between 2019 and 2023. The data based used was Google Scholar, PubMed and Science Direct. The results of the analysis show that the concept of resilience has seven attributes, namely: emotion regulation, impulse control, optimism, causal analysis, empathy, self-efficacy and reaching out. Based on these attributes, nurses comprehensively assess resilience in stroke patients. The results of this assessment will be the basis for nurses in determining diagnoses and nursing interventions that can increase resilience in stroke patients resulting in increased quality of life, reduced psychological impact, optimism and adaptation.

Keywords: Concept Analysis, Resilience, Stroke.

1. Introduction

Stroke is a health problem that requires special attention [1]. Stroke can happen to anyone regardless of age, it can happen repeatedly or just happen to everyone. Stroke is the number one cause of disability and the number three cause of death in the world after heart disease and cancer, in both developed and developing countries [2]. Apart from that, stroke is a cause of depression and dementia [3].

The incidence of stroke worldwide every year is 15 million people suffer from stroke. Of this number, 5 million died and 5 million others suffered/experienced permanent disabilities [4]. Stroke is the leading cause of disability worldwide and the second leading cause of death. According to the Global Stroke Fact Sheet released in 2022, the lifetime risk of stroke has increased by 50% over the last 17 years and now 1 in 4 people are estimated to have a stroke in their lifetime [5].

The incidence of stroke in America reaches 500,000 per year. In developing countries, the number of stroke sufferers is quite high, reaching two-thirds of the number of stroke sufferers worldwide. Developing countries also account for 85.5% of stroke deaths

worldwide [6]. The prevalence of stroke in Indonesia in 2018 based on doctor's diagnosis in the population aged ≥ 15 years was (10.9%) or estimated at 2,120,362 people [7].

Stroke is part of cardiocerebrovascular disease which is classified as a catastrophic disease because it has broad economic and social impacts [8]. Stroke according to its level can cause death or disability which can automatically reduce the health status and quality of life of the sufferer. Apart from that, there will be additional burdens for families related to health costs, which of course will not be in small part due to the costs that must be borne by the state [9].

Stroke is an acute disease and comes suddenly without prior knowledge. Individuals who experience a stroke certainly do not expect the impact that will result, such as experiencing paralysis in certain affected physical members. Stroke can lead to depression, this is due to a previously healthy physical condition suddenly experiencing paralysis and causing disruption to certain physical parts so that they are unable to do things independently and depend on other people [6].

Every stroke sufferer has different stages in achieving recovery [10]. Recovery after a stroke is a long process that lasts several years, most of the recovery can occur during the first two to three years [11]. Individuals adapting to long-term conditions of disability require the ability to survive and be able to get back on their feet and continue their lives [12]. The ability to adapt and survive difficulties, as well as bounce back from adversity is called resilience [13]. The resilience ability of stroke sufferers can decrease or increase, it all depends on each individual [14].

2. Method

Concept analysis is about studying the meaning of concepts with the aim of resolving gaps and providing better understanding [15]. The method used in this concept analysis refers to the method developed by *Walker & Avant (2019)*, namely: 1) selecting a concept, 2) determining objectives, 3) identifying concept use, 4) determining attributes, 5) creating a case model, 6) make borderline and contrary cases, 7) identify antecedence and consequences and 8) determine empirical referents. A literature search was carried out using the keywords "analysis concepts", "resilience" and "stroke patients". The data base used and the number of articles used were Google Scholar, PubMed and Science Direct. The criteria for articles selected in this concept analysis were English language. and in Indonesian, published between 2019 and 2023 and open access.

3. Results And Discussion

The articles used in this concept analysis are from various fields of scientific study. Article discussing the concept of resilience from the perspective of psychology, anthropology and

sociology, emergency nursing and disaster management and spiritual/religious science. In this discussion, the stages of concept analysis will be described sequentially based on [16], namely as follows:

3.1. Choose a Concept

The concept of resilience was chosen in the theoretical analysis based on the phenomenon of stroke attacks occurring suddenly. Stroke patients will feel useless because they are unable to carry out daily activities due to a stroke, such as weakness in their limbs. Apart from that, the patient will also feel that he is worthless because of his existing disability. Resilience in post-stroke patients is important to minimize or reduce the psychological impacts they experience [12]. Resilience is essential to minimize or minimize the psychological impact felt by those affected. Resilience can improve the psychological health and quality of life of those affected [17].

3.2. Determine the Purpose of the Analysis

This concept analysis was carried out to develop an operational definition of resilience in stroke patients so that it can be differentiated from empowerment. The aim is to identify all uses of the concept and to provide direction for research related to resilience in stroke patients to achieve optimal quality of life.

3.3. Identify All Uses of the Concept

A literature search from various fields of science including language dictionaries was carried out to determine the characteristics of concept use [16]. By knowing the characteristics, understanding of the concept will become more complex when viewed from various scientific points of view. Based on the results of literature searches, the concept of resilience is used in the fields of psychology, anthropology and sociology, emergency nursing and disaster management and spiritual/religious science.

The definition of the word resilience in the field of psychology is that resilience comes from the term ego resilience, which means a personality trait. Meanwhile resilience is more of a dynamic development process, which involves efforts to maintain positive coping and adaptation in facing various difficult situations [18]. In the fields of anthropology and sociology, resilience is an initial understanding, which is more passive, that a system has the ability to return to its previous condition after a disturbance [4]. In the field of emergency nursing and disaster management, (resilience) with the elderly in simple terms, community resilience is the community's ability to survive and recover from disasters [3]. In the spiritual/religious field in general, the concept of resilience is a phenomenon characterized by patterns of positive adaptation in the context of significant difficulties or risks. Resilience is a collection of phenomena characterized by positive adaptation patterns in the context of adversity [19].

3.4. Define Attributes

Determining attributes is a core part of the concept analysis process. This is because at this stage the characteristics or attributes that form the concept are defined. The attributes that have been identified will differentiate between one concept and another [16]. The attributes that form the concept of resilience include (1) emotion regulation, (2) impulse control, (3) optimism, (4) causal analysis, (5) empathy, (6) self-efficacy, (7) reaching out. According to Reivich & Shatte (2003) in their book entitled "The Resilience Factor: 7 Keys to Finding Your Inner Strength and Overcoming Life's Hurdles" states that there are seven aspects that form resilience, namely: (1) emotion regulation (the ability of each individual to remain calm even under stressful conditions), (2) impulse control (the individual's ability to control the desires that arise within him), (3) optimism (the individual's ability to believe that their life can change for the better), (4) causal analysis (the individual's ability to identify the causes of the problems being faced in his life), (5) empathy (the individual's ability to understand the psychological or emotional conditions shown by other people), (6) self-efficacy (the individual's ability to solve the problems he is facing), (7) reaching out (an individual's ability to reach positive aspects of their problems after experiencing life difficulties [12]).

3.5. Create a case model

Creating a case model is an attempt to explain each characteristic of the concept in the exemplary case. Cases can come from facts that occur in the environment, literature or the results of the author's construction [16]. The case model presented below comes from environmental observations of stroke patients who experience a sudden attack.

Mr. A (52 years old) suddenly experienced a mild stroke which caused weakness in his left leg. Mr. A said that at first he was embarrassed by the condition of his legs which were difficult to move, but as time went by Mr. A calmed down and surrendered to his limitations. Currently, Mr. A is still busy with his condition, even though he is sick, Mr. A continues to pray as much as he can. Even though his illness was difficult at first, Mr. A accepted this fact by trying to adapt to his situation. Mr. A was sure he would be able to recover from his illness. The initial pain occurred when I was working in the office, suddenly my legs felt difficult to walk and I complained of a slight dizziness, at that time I was advised to check my laboratory and blood pressure. Mr. A felt pity and pity when he saw that there were other stroke patients whose condition was worse than him. Initially, Mr. A always followed other people's advice to get well quickly, starting from herbal medicine and acupuncture until now he only sees a doctor. Mr. A said the cause of his illness was due to poor diet and irregular sleep, but he realized that now was the time to rest and retire so he could get closer to God.

The case model presented includes all resilience attributes in stroke patients. Resilience in emotional regulation Mr. A said that at first he was embarrassed by the condition of his legs which were difficult to move, but as time went by Mr. A calmed down and surrendered to his limitations. Resilience through impulse control. Currently, Mr. A keeps himself busy with his condition. Even though he is sick, Mr. A continues to pray as much as he can. Optimistically resilient, even though initially his illness was difficult, Mr. A accepted this reality by trying to adapt to his situation. Mr. A was sure he would be able to recover from his illness. Resilience causally analyzed the initial illness when I was working in the office, suddenly my legs felt heavy to walk and I complained a little dizzy, at that time I was advised to check my laboratory and blood pressure. Resilience through empathy Mr. A felt compassion and pity when he saw that there were other stroke patients whose condition was worse than him. Resilience in terms of self-efficacy, initially Mr. A always followed advice from other people to get well quickly, starting from herbal medicine and acupuncture until finally now he only goes to the doctor. Resilience by reaching out Mr. A said the cause of his illness was due to poor diet and irregular sleep, but he realized that now was the time to rest and retire so he could get closer to God.

3.6. Conceptualize Borderline and Contrary Cases

Creating borderline cases aims to explain examples where some characteristics of the concept are not present in the case. Meanwhile, contrary cases are cases that do not describe the concept in question because there are no characteristics of the concept at all.

Borderline case

Mrs. Y (45 years old), a factory worker and housewife suddenly had a stroke. Mrs. Y said she was embarrassed and sad when she felt that her right hand suddenly couldn't move. Initially, Mrs. Y couldn't accept her condition. After the recovery process, her condition gradually improved so that Mrs. Y is now calmer. Mrs. Y, despite her limitations, continues to do activities at home as much as she can. Mrs. Y said that at first it was difficult to accept the reality of adapting to her illness, but Mrs. Y was confident that she would get through the illness and recover. At the beginning of the incident, when Mrs. Y was working at the factory, she suddenly felt unsteady in her walking and felt a little dizzy, possibly from high blood pressure. Mrs. Y felt sorry for someone who had a stroke worse than her. If Mrs. Y heard a story about someone who was sick like her, she was immediately advised to see a doctor. Mrs. Y sought treatment from smart people, herbal or medical because she wanted to recover quickly from her illness. Mrs. Y said the cause of her illness was because it was sent from someone else or was used by her enemy.

Contrary case

Mr. J (50 years old), a worker in the rice fields, suddenly had a stroke while working. Mr. J lives in a remote area far from health facilities. His friend Mr.

J was taken to a shaman for treatment and given traditional medicine. Mr. J has no savings because the money from work is only enough for food. Mr. J currently lives alone because he lives alone, Mr. J is resigned to his situation and only hopes for mercy from other people. Currently Mr. J is unable to work due to weakness in both legs.

Based on the example of the borderline case above, it is known that Mrs. Y mother has the characteristics of the concept of resilience from the aspect of emotion regulation. Mrs. Y said she was embarrassed and sad when she felt that her right hand suddenly couldn't move. At first, Mrs. Y couldn't accept her condition. After the recovery process, her condition gradually improved so that Mrs. Y is now become calmer. From the aspect of impulse control, Mrs. Y, despite her limitations, still carries out activities at home as much as she can. From the aspect of optimism, Mrs. Y said that at first it was difficult to accept the reality of adapting to her illness, but Mrs. Y was confident that she would get through the illness and recover. From the causal analysis aspect, the initial incident occurred when Mrs. Y was working at the factory and suddenly felt unsteady in her walking and a little dizzy, possibly due to high tension. From the aspect of empathy, Mrs. Y felt sorry for the fact that there were people who had strokes worse than her. If Mrs. Y heard a story about someone who was sick like her, she was immediately advised to see a doctor. From the aspect of self-efficacy, Mrs. Y sought treatment from smart people, herbal or medical because she wanted to recover quickly from her illness. However, there is an opinion that the illness was sent by someone else or because of being used by an enemy, which does not show the characteristics of the concept of resilience by reaching out.

3.7. Identify Antecedents and Consequences

Antecedent

Antecedents are factors that have occurred previously that influence the attributes that are characteristic of the concept [16]. Antecedents in resilience in stroke patients are factors that influence the condition of resilience, including decreased physical function, decreased psychological/mental function and decreased family and social function.

a) Decreased physical function

Stroke is a major cause of impaired physical function and one of the main causes of increased morbidity and mortality in adults. Stroke causes nerve and muscle changes secondary to upper motor neuron lesions, which cause abnormally increased muscle tone and muscle stiffness due to muscle atrophy and hypertonia (Aziz & Supriyadi, 2021).

b) Decreased psychological/mental function

Stroke causes various problems such as psychological disorders and impaired cerebral function [21].

c. Decreased family and social functioning

Fulfilling physical activity for elderly people with stroke can be helped by the family because elderly people experience changes in physical function and it is difficult for elderly people to fulfill their living needs independently, which results in dependency [21].

Consequences

Consequences are the outcome of the concept. The consequences of resilience in stroke patients are an increase in quality of life, reduced psychological impact and adaptation.

a. Improved quality of life

Resilience is a predictor factor in quality of life after stroke. The impact of a stroke is usually difficult to anticipate and is often disturbing and will require major lifestyle and psychological adjustments. Emotional changes frequently observed after stroke are generally associated with reduced quality of life. Therefore, adapting to conditions of long-term disability requires the ability to bounce back and remain flexible in the face of ongoing pressure [17].

b. Reduces psychological impact

Indicators of resilience facilitate adaptation to the psychological impact of post-stroke sufferers. Resilience in this case is important to be able to minimize or reduce the psychological impact experienced by sufferers, reducing the psychological impact of anxiety and depression [17].

c. Adaptation

Resilience can prevent sufferers from relapsing as well as help with better rehabilitation and adaptation [22].

3.8. Determine Empirical Referents

Empirical referents are actual data whose presence indicates the occurrence of a concept and can be used to recognize the characteristics or attributes that form a concept [16]. The following instruments have been researched, namely: Growth-focused resilience or better known as the Resilience Questionnaire-Amir, Standen (2019). The psychological resilience measuring tool is defined as an individual's capacity to recover or rise after experiencing difficulties or trauma [23].

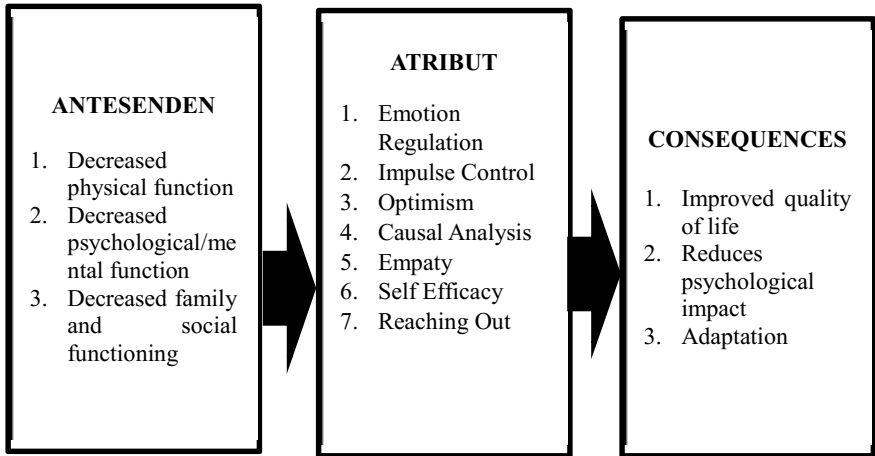


Fig 1. Resilience Model Concept in Stroke Patients

4. Conclusion

Based on the results of the analysis of the concept of readiness, there are seven attributes, namely: (1) emotion regulation, (2) impulse control, (3) optimism, (4) causal analysis, (5) empathy, (6) self-efficacy and (7) reaching out. Based on these attributes, nurses comprehensively assess resilience in stroke patients. The results of this assessment will be the basis for nurses in determining diagnoses and nursing interventions that can increase resilience in stroke patients resulting in increased quality of life, reduced psychological impact and adaptation.

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