**Original Article**

Application Of the Defense Style Questionnaire (DSQ) Model Of Self Defense Mechanism In Post Stroke Patients

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ARTICLE INFO	ABSTRACT
  	Background: *Post-stroke patients experience changes in physical function, so they need self-defense mechanisms to adapt to their conditions. The self-defense mechanism model a person, uses appears when a person faces a reality that causes fear, anxiety, and insecurity. The purpose of this study was to determine the model of self-defense mechanisms in post-stroke patients in the working area of the UPTD Bendo Health Center, Pare District, Kediri Regency.* ***Methods:*** *The research design is descriptive, the research population is 56 people, and the research sample is 49 respondents using a purposive sampling technique. The research was conducted on March 20 - April 20, 2023. The research variables were models of self-defense mechanisms in post-stroke patients. The research instrument used a defense-style questionnaire.* ***Results:*** *The results showed that 22.40% used the mature, neurotic, immature model, 10.2% of the respondents used mature and neurotic, 14.3% of the respondents used the mature, immature model, 8.20% of the respondents used neurotic, immature, 16.3% respondents used the mature model, 8.20% used immature and 8.20% used neurotic and 12.2 respondents did not use the self-defense mechanism model.* ***Conclusion:*** *The self-defense mechanism model used by respondents was influenced by several factors, including age, gender, work history, and family support information. Models of self-defense mechanisms in post-stroke can be used simultaneously or alternately, useful for facilitating physical adaptation for post-stroke patients.*

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Introduction

Stroke attacks can cause sequelae for sufferers, including disability and loss of body functions (Hutagaluh, 2019). Loss of body functions in post-stroke patients can affect self-acceptance and compensatory mechanisms for bodily functions physically and psychologically, one of which is a self-defense mechanism. A self-defense mechanism or defense Mechanism is an effort made by someone to adjust the ego to

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feelings of not strong or unpleasant feelings (Hidayati & Violita, 2015; Kahn et al., 2015; Tapp et al., 2018). Based on the problems in the field, there are many patients with post-stroke conditions whose quality of life has decreased (Nuraini, 2015; Perdossi, 2016). This is due to the lack of support from the surrounding family, thus causing post-stroke patients to have a less-than-optimal or disrupted rehabilitation stage. Adaptation in post-stroke patients aims to restore bodily functions and can prevent patients from complications of stroke (Mulyani et al., 2012).

According to the Ministry of Health of the Republic of Indonesia, in 2018, stroke prevalence in Indonesia In 2019, Stroke was the second leading cause of death in the world after Heart Disease, with a death rate of 11%. Moreover, on average, 65% of the causes of stroke are hypertension. The World Health Organization (WHO) explains that deaths caused by stroke continue to increase yearly, namely 137,000 people per year. Stroke in Indonesia is in the top 10 most cases in Indonesia and has experienced a significant increase every year (Araviq A.Hanyala, 2020; Creutzfeldt et al., 2021). After the patient experiences a stroke for the first time or the critical phase, stroke patients are in the post-stroke phase. In this phase, the patient will experience paralysis of the limbs, difficulty eating or swallowing, difficulty speaking, and emotional and psychological disorders may occur (Budi Nugroho et al., 2020).

Post-stroke patients who experience impaired function need help carrying out physical activities, maintaining personal hygiene, meeting nutritional needs, and preventing injuries or falls (Budi Nugroho et al., 2020). Powerlessness and decreased activity ability are stressors for patients, so post-stroke patients need a good defense mechanism (Nuraliyah & Burmanajaya, 2019). The purpose of this study was to determine the model of self-defense mechanisms in post-stroke patients in the working area of the UPTD Bendo Health Center, Pare District, Kediri Regency.

It is hoped that self-defense mechanisms are not only used after stroke but can be used by all patients with chronic or palliative diseases who require an accurate model of self-defense mechanisms to adapt to the changes they are experiencing. Both physical and psychological changes, so that the quality of life is increasing.

Methods

The research design is descriptive, the research population is 56 people, and the research sample is 49 respondents using a purposive sampling technique. Criteria for post-stroke patients who do not experience complications. Variable research model of self-defense mechanisms in post-stroke patients. The research was conducted on March 20 – April 20, 2023. Data collection was carried out by meeting patients who live in the working area of the UPTD Bendo Health Center, Pare District, Kediri Regency, using a scale research instrument defense style quiz (DSQ) 40. Selection range 1-9. The higher the number choice indicates, the more agree with the statement. The total number of statements is 40 items. Analysis technique by determining the mean. The resulting value ≥ the mean then shows the self-defense mechanism model. Ethical approval was carried out prior to data collection, carried out by the STIKES Karya Husada research ethics committee, with ethically feasible results number: 029/EC/LPPM/STIKES/KH/I/2023

Results

The discussion of the results of the research and testing obtained is presented in the form of theoretical descriptions, both qualitatively and quantitatively. The experimental results should be displayed in a table.

Table 1 Characteristics of respondents based on general data

Variable	Category	frequency	%
Age	≥56 years old	30	61
	46-55 years old	17	35
	36-45 years old	2	4
Gender	Man	29	59
	Woman	20	41
Education	Collage	1	2
	Senior High School	7	14
	Junior High School	11	22
Old *Stroke*	≥ 1 year	29	60
	1 year	7	14
	6-11 months	11	22
	1-5 months	2	4
Marital status	Marry	49	100
Work	IRT	11	22
	civil servant	1	2
	Farmer	26	54
	Private Officer	7	14
	Self-employed	4	8
Stay together	Wife husband	37	76
	Child	11	22
	Grandson	1	2

Based on Table 1: explains that age 61% ≥56 years, 59% are male, 22% have junior high school education, 22% of stroke duration of 6-11 months, all respondents are married, 54% work as farmers, live with husband or wife 76%.

Table 2 Characteristics of respondents based on specific data

Variable	Category	frequency	%
Self-defense mechanism model	Mature, neurotic, Immature	11	22,4
	Mature, Neurotic	5	10,20
	Mature, Immature	7	14,30
	Neurotic, Immature	4	8,20
	Mature	8	16,30
	Neurotic	4	8,20
	Immature	4	8,20
	Not all	6	12,2
Total		**49**	**100**

Based on Table 2. It explains that the respondents used mature, neurotic, and immature self-defense mechanism models as much as 22.4% and only used one of the self-defense mechanism models, namely neurotic or immature, as 8.2%

Discussion

Based on the research results, 22.4% of respondents used mature, neurotic, and immature self-defense mechanism models. Respondents used three models at once. Respondents who did not use the self-defense mechanism model were 12.2%.

The parameters for the mature self-defense mechanism model include sublimation, humor, anticipation, and suppression. The highest mean is sublimation, 7.5, while the lowest is humor. The neurotic parameters include pseudo-altruism, undoing, reaction-formation, and idealization. The highest mean in the neurotic model is idealization at 7.8, and the lowest in reaction formation is 5.9. Immature projection parameters include passive aggression, acting out, isolation, devaluation, autistic fantasy, denial, displacement, dissociation, splitting, rationalization, and somatization. The highest mean is acting out, reaching an average of 6.2, and the lowest is in the projection parameter, 3.4.

Self-defense mechanisms can occur due to several factors, including anxiety, conflict, and stress. A self-defense mechanism or defense Mechanism is an effort made by someone to adjust the ego to avoid strong or unpleasant feelings. Self-defense mechanisms (Defense Mechanisms) in a person will appear when that person faces a reality that causes fear, anxiety, and insecurity. In addition, self-defense mechanisms will appear unconsciously or in a person's subconscious as a response to threats (Oktavia et al., 2018).

Self-defense mechanisms are divided into three categories, namely mature defense mechanisms (Mature), neurotic defense mechanisms (Neurotic), and immature defense mechanisms (Immature). Each category of defense mechanism has several defenses that reflect that category. Mature defense mechanisms are defense mechanisms that involve cognitive distortions at work but are relatively small, and most are diversions from unwanted experiences or realities. The Mature defense category can be controlled consciously and shows a good psychological condition.

The second is the Neurotic Defense Mechanism, where this type of defense involves greater cognitive distortions than mature defense mechanisms. Neurotic Defense Mechanisms are also totally at odds with reality. Third is the immature defense mechanism; this defense mechanism is a defense mechanism that involves more extreme cognitive distortions compared to mature and neurotic ones. By involving these extreme cognitive distortions, it can also disrupt existing reality. This is often encountered when experiencing severe stress and experiencing personality disorders, and paranoid disorders. Individuals can use self-defense mechanisms simultaneously or alternately (Tapp et al., 2018).

This is consistent with the study results, which showed that 22% of respondents, namely post-stroke, used three models simultaneously. Using a mature coping mechanism model, which shows the highest mean is sublimation, and the lowest is humor. This follows research by Ghani, 2016 which states that almost all stroke patients experience emotional problems, and the possibility of being very vulnerable to experiencing emotional disorders increases. For the neurotic self-

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defense mechanism model, idealization is the parameter that shows the highest mean; individuals have an overvaluation of things considered fun. This is done as an individual effort to minimize depression because depressive emotional disorders often accompany strokes, occurring several months after the attack (Nuraliyah & Burmanajaya, 2019). For immatures, acting out is the parameter with the highest mean results, where respondents act quickly or respond quickly when faced with conflict or pressure.

Several factors that play an influencing role are gender; the majority of respondents are male, namely as many as 29 respondents, with a percentage of 59%. Following Carl Gustav Jung's theory in (Suryosumunar, 2019), the male gender influences a person's response to problems or anxiety. Men usually face anxiety in any way so that anxiety can be overcome; besides that, men are known as the fight response. The fight response is the type of person who tends to face problems and solve them completely. So that in this case, the male respondents tend to use three models of mechanisms at once because one example is the fight response in dealing with problems or anxiety. In addition, men will usually think of all ways to deal with the anxiety they experience, whether positive or negative. So that in this study, men tend to use more than one Self Defense Mechanism Model because of this trait. In addition, all respondents to the research on marital status were married. In this case, the partner provides support during the patient's illness or recovery period. Family support can also influence someone to use the Self-Defense Mechanism Model. This aligns with Niven and Neil's theory, which states that social support can play a role in choosing self-defense strategies in dealing with anxiety. Social support can help enhance an individual's Self-Defense Mechanism by providing alternative strategies that build on previous experiences and get others to focus on the more positive aspects of the situation(Grotta et al., 2021; Mulyani et al., 2012; Sairanen et al., 2009).

The study also showed that 12.2% of respondents did not use the self-defense mechanism model. This can be influenced by age and work factors. Respondents who do not use self-defense mechanisms ≥56 years, this is in line with Boedhi Darmojo's theory (Dewi et al., 2018), namely that someone who has experienced the aging process will tend to experience a decrease in the function of his body's systems and one of them is cognitive function. Decreasing cognitive function in the elderly tends to make it difficult to deal with anxiety or a problem they face. In the 2018 Riskesdas, the elderly occupy the first position in most cases of depression, and this is because the elderly experience cognitive decline, which makes it difficult for the elderly to deal with anxiety (Moss et al., 2021; Sriwana, 2019). In this study, only a few respondents used the mature or Mature Self-Defense Mechanism Model because many respondents were elderly, which made the respondents unable to cope with anxiety properly. While the work factor, the average respondent is a farmer. The last job can also influence someone using the Self Defense Mechanism Model. This follows the results of a study conducted by Daghagh Yazd, Sarah, and Alec Zuo in 2019, which stated that farmers have worse mental health problems than the general population. So that with these circumstances, farmers tend to find it more difficult to apply good Self Defense Mechanisms in dealing with anxiety or problem (Daghagh Yazd et al., 2019).

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Conclusion

The most widely used post-stroke self-defense mechanism model is three models used at once and at least uses a neurotic or immature model.

Authors Contributions

The author carries out tasks from data collection, data analysis, and making discussions to making manuscripts.

Conflicts of Interest

There is no conflict of interest.

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