

Conference Paper

Subjective Well-Being, Mastery of Roles and Their Relationships with Families among Stroke Patients in the Rehabilitation Period

Cecep Eli Kosasih, Chandra Isabella Hostonida Purba, and Tetti Solehati

Faculty of Nursing, Universitas Padjadjaran, Indonesia

Abstract

Patients with stroke face a number of problems that include physical, social, emotional, psychological, and spiritual problems. It caused a decrease in the well-being that he felt by stroke patients, also coupled with a decrease in the ability to perform daily roles and decreased well-being social relationship, especially relations with his family. This study aimed to identify well-being, mastery of roles, and well-being of relationships with families and was associated with demographic characteristics. This research used quantitative descriptive methods. The sample consisted of stroke patients who were outpatient at a hospital in Bandung. A total of 96 respondents were taken based on inclusion and exclusion criteria. The instruments used were personal well-being index, Role-Function Mode Scale, and Brief Family Relationship Scale. Data analysis used descriptive statistics and chi square. The results showed that half (50%) of stroke patients experienced poor well-being. There were still those who said that almost half (39.60%) of stroke patients said that mastery of roles was not good. Likewise with the well-being of relations, there were still those who said almost half (35.40%) of the welfare of their relationships was not good. From the analysis of the relationship between demographic characteristics, it found that there was a significant relationship between the subjective well-being of stroke patients and the relationship between respondents and families ($p = 0.001$). Conclusions is well-being, mastery of roles, and relationships with families in stroke patients are still not satisfactory. Efforts are needed that can increase family support effectively for stroke patients.

Keywords: family relationship, role, stroke, well-being

Corresponding Author:

Cecep Eli Kosasih

cecep.e.kosasih@unpad.ac.id

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1. Introduction

As a non-communicable disease, stroke is a problem throughout the world. The annual mortality due to cardiovascular disease is projected to increase from 17 million in 2008 to 25 million in 2030 [1]. Stroke was the third leading cause of death in Indonesia. The incidence of stroke in Indonesia was 8.3 per 1,000 in 2007, and this increased to 12.1 per 1,000 in 2013[2]. Patients with regular strokes face a number of problems that include physical, social, emotional, psychological, and spiritual problems. [3] One of

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the problems of stroke is the weakness of even limb paralysis, this condition causes stroke patients to experience limitations in carrying out their functions as in daily activities. Stroke patients experienced a decrease in their daily activities independently compared to someone of the same age who does not have a stroke [4]. Stroke can also cause a decrease in subjective well-being in patients [5]. Stroke also causes patients to experience limitations in their ability to adjust their families, and disruption of an active role in carrying out their obligations in their family life [6]. Besides that there is also significant family dysfunction in the first nine months after stroke and significant conflict among family members [7]. Pound, Gompertz, and Ebrahim found that one in four stroke sufferers had problems in social relationships with their partners.

The impact of stroke physically results in the weakness of physical members, but other impacts non-physically can arise. Some problems with some of these problems are subjective well-being, mastery of roles and relationships in the family in stroke patients. Therefore, research is needed to identify problems in stroke patients. Besides that this research is important to reveal because it will affect the lives of stroke patients while undergoing stroke rehabilitation. Stroke rehabilitation requires considerable time to restore the patient's ability to close to his initial abilities. Besides that, the results of this study will make it easier for health workers to identify the right actions for a stroke patient. Therefore, the purpose of this study was to identify subjective well-being, role mastery, and family relationships of stroke patients in Bandung and to identify the relationship between demographic characteristics and subjective well-being, role control, and family relationships.

2. Methods

2.1. Study design

Descriptive cross-sectional studies were conducted in this study. This approach was used to review and identify several problems related to the implementation of care for stroke patients both at the hospital and after returning home. The quantitative approach to obtain clear and accurate information about the profile of stroke patients and their families includes: subjective well-being, role mastery, and well-being of relationships with family. This research was conducted in 2018.

2.1.1. Sample

The number of samples in this study of 96 respondents. The population in this study was unknown in number. According to Wibisono in Riduwan and Akdon, the formula in calculating samples in unknown populations was as follows:

$$n = \left(\frac{Z_{\alpha/2\sigma}}{e} \right)^2 = \left(\frac{(1,96) \cdot (0,25)}{0,05} \right)^2 = 96,0$$

That way the researcher believes with a 95% confidence level that the random sample size is 96.04 with a μ less than 0.05. So, the sample taken was 96 people.

The sample was taken using purposive sampling techniques based on inclusion and exclusion criteria. The inclusion criteria of the study for the stroke patients were: 1) adult (more than 21 years old); 2) could communicate in Bahasa Indonesia; 3) accompanied by the family caregiver; 4) did not have severe expressive or receptive language problems; 5) did not diagnose with psychosis or depression; and 6) undergoing rehabilitation periods. For the family caregivers were 1) aged 18 years and over; 2) could provide support for the patients; 3) stayed in the same house with the stroke patients; and 4) was the most responsible to provide care for the stroke patients at least for 2 months. The exclusion criteria for the patients and their families were 1) refused to continue the program; and 2) had any serious illnesses during the process of the study such as cardiac diseases, epileptic, or infectious diseases.

2.1.2. Instrument

The instrument in this study was a questionnaire consisting of a personal well-being index, a Role-Function Mode Scale, and a Brief Family Relationship Scale. The Personal Wellbeing Index Adult (PWI-A) has been used to measure the subjective dimension of QOL-Subjective Wellbeing. The PWI-A has been applied to the adult population. The PWI consisted of: standard of living, personal health, and achievement in life, personal relationships, personal safety, community connectedness, future security, and religion / spirituality. Convergent validity found with a correlation of .78 with satisfaction with life scale [8]. Reliability: Cronbach alpha lied between .70 and .85 in Australia and overseas. Akyil and Erguney (2013) developed the Role function mode scale. This tool was used to evaluate the role mastery following a stroke. The mastery role can be observed by the role functioning in the society. The formulation of role function mode questions as do not agree, partly agreed, and entirely agreed; They were attributed, respectively, 0, 1, and 2 points. The range of the possible total score was 0–12 for role-function adaptation. Fok, Allen, Henry, and Team (2014) developed the BFRS. The BFRS was adapted from the

27-item relationship dimensions of the Family Environment Scale (FES) [9]. It consists of cohesion, expressiveness, and conflict subscales (9 items each).

2.1.3. Procedure

Ethical clearance was obtained from the ethical committee of the medical faculty of UNPAD. At the data collection stage, stroke patients who were treated in the neurological clinic be asked for permission to participate in this study, informed consent was obtained. The researcher provided instruments to identify demographic data, subjective well-being, role mastery, and relationship well-being.

2.2. Data analysis

Data analysis was descriptive and associative. Demographic information from stroke patients was analyzed by descriptive statistics. The data was analyzed to find out the mean and standard deviation, the variables be presented by frequency and percentage. To see the relationship between the variable, chi square was used. The research location in 2018 was carried out at Al Islam Bandung Hospital, outpatient room, home care and stroke center.

3. Results

The results consisted of demographic characteristics and research variable variables. From the results of data analysis it was found that the characteristics of respondents were as follows: the age of respondents was at an average of 64.6 years, more than half (55.20%) of female sex, almost half (45.80%) of respondents had a relationship with the family of caregivers was a couple, most (28.10%) of them have no job, almost half (43.80%) were college educated, 100% were Muslim, most (82.30%) of strokes they experience was a type of infarction stroke, and more than half (56.30%) have lesions on the left side of the body. For more details, see Table 1 below.

Family characteristics that accompany stroke patients have an average age of 47.84 years. Most (74.00%) were women, almost half (38.50%) of them were partners of stroke patients, half (50.00%) of these families had college education. For more details, see Table 2 below.

From the results of the analysis it was found that the average subjective well-being felt by stroke patients had a score of 60.27 (SD = 13.69), of which half (50%) of stroke

TABLE 1: Distribution of frequency characteristics of respondents (n = 96).

Demographic characteristic	n	%
Age (years)	$M \pm SD = 64.90 \pm 12.594$	
Gender Male	43	44.8
Female	53	55.2
Relationship with family caregiver		
Spouse	44	45.8
child	28	29.2
Others	24	25.0
Occupation		
Unemployed	27	28.1
Government official	12	12.5
Businessman/self employed	14	14.6
Retired	35	36.5
Others	8	8.3
Education		
No education	2	2.1
Elementary school	17	17.7
Primary school	8	8.3
Secondary school	27	28.1
College/University	42	43.8
Religion		
Islam	96	100.0
Type of stroke		
Infarction	79	82.3
Hemorrhagic	17	17.7
Lesion of stroke		
Right hemisphere	35	36.5
Left hemisphere	54	56.3
Others	7	7.3

patients experienced poor of subjective well-being. For mastery of roles during a stroke, they stated that the average role mastery score was 8.24 (SD = 3.46), which still stated that almost half (39.60%) of stroke patients said mastery of their role not good. Likewise, with well-being of relationship, the average well-being of relationship score was 34.90 (SD = 3.675), and there are still those who say almost half (35.40%) of their well-being was not good. For more details, see Table 3 below.

Based on the results of the analysis it was found that there was no relationship between demographic characteristics between age, sex, occupation, and respondent's education with the subjective well-being of respondents ($p > 0.05$), but there was a

TABLE 2: Frequency distribution of family characteristics (n = 96).

Demographic characteristic	n	%
Age (years)	$M \pm SD = 47.84 \pm 15.311$	
Gender		
Male	25	26.0
Female	71	74.0
Relationship with the respondent		
Spouse	37	38.5
Child	33	34.4
Parent	9	9.4
Others	17	17.7
Family occupation		
Unemployed	33	34.4
Government official	9	9.4
Businessman/self employed	15	15.6
Others	39	40.6
Family Education		
Elementary school	4	4.2
Primary school	7	7.3
Secondary school	37	38.5
College/University	48	50.0

TABLE 3: Frequency distribution of categories of subjective well-being, role mastery, and family relationship welfare (n = 96).

Variable	n	%
Subjective well-being	$M \pm SD = 60.27 \pm 13.696$	
Subjective well-being categorical		
Poor	48	50.0
Good	48	50.0
Role mastery	$M \pm SD = 8.24 \pm 3.460$	
Role mastery categorical		
Poor	38	39.6
Good	58	60.4
Well-being of relationship	$M \pm SD = 34.90 \pm 3.675$	
Well-being of relationship categorical		
Poor	34	35.4
Good	62	64.6

significant relationship between subjective well-being and respondents' relationships with families ($p < 0.05$). For more details, see Table 4.

For the relationship between demographic characteristics and mastery of roles, it was found that there was no relationship between demographic characteristics between

TABLE 4: Relationship between demographic characteristics and subjective well-being (n = 96).

Demographic characteristic	Categorical		X ²	p
	Poor	Good		
Ages			3.976	.408
26-35	0	1		
36-45	0	5		
46-55	7	11		
56-65	11	14		
65+	16	31		
Gender			.042	.837
Male	22	21		
Female	26	27		
Relationship with family caregiver			14.128	.001
Spouse	25	19		
child	6	22		
Others	17	7		
Occupation			3.913	.418
Unemployed	14	13		
Government official	8	4		
Businessman/self employed	8	6		
Retired	16	19		
Others	2	6		
Education			.977	.913
No education	1	1		
Elementary school	8	9		
Primary school	3	5		
Secondary school	13	14		
College/University	23	19		

age, sex, respondents' relationship with family, work, and education of respondents with mastery of the role of respondents ($p > 0.05$). For more details, see Table 5.

The relationship between demographic characteristics and well-being of relationship, it was found that there was no relationship between demographic characteristics between age, gender, respondents' relationship with family, work, and respondent's education with mastery of the respondent's role ($p > 0.05$). For more details, see Table 6.

TABLE 5: Relationship between demographic characteristics and mastery of roles (n = 96).

Demographic characteristic	Categorical		X ²	p
	Poor	Good		
Ages			6.011	.161
26-35	1	0		
36-45	1	4		
46-55	7	11		
56-65	14	11		
65+	15	32		
Gender			1.607	.205
Male	14	29		
Female	24	29		
Relationship with family caregiver			.584	.747
Spouse	17	27		
child	10	18		
Others	11	13		
Occupation			5.745	.219
Unemployed	9	18		
Government official	8	4		
Businessman/self employed	7	7		
Retired	11	24		
Others	3	5		
Education			4.273	.370
No education	2	0		
Elementary school	8	9		
Primary school	2	6		
Secondary school	10	17		
College/University	16	26		

4. Discussion

From the results of the analysis it was found that the average subjective well-being felt by stroke patients had a score of 60.27 (SD = 13.69), of which half (50%) of stroke patients experienced poor of subjective well-being. The patients suffering a stroke can have a low sense of well-being. A number of previous studies had shown that the patients who had had a stroke experienced a reduced sense of well-being [5] Moreover, Clarke et al. [5] reported that stroke survivors were also more likely to be restricted in their physical and cognitive functions, to report worse mental health, and to be living with a greater number of co morbid health conditions. Mental health and physical and cognitive disabilities are associated with a reduced sense of well-being in

TABLE 6: Relationship between demographic characteristics and well-being of relationship (n = 96).

Demographic characteristic	Categorical		X ²	p
	Poor	Good		
Ages			7.074	.102
26-35	0	1		
36-45	0	5		
46-55	11	7.278		
56-65	14	11		
65+	23	24		
Gender				.598
Male	14	29		
Female	20	33		
Relationship with family caregiver			3.385	.184
Spouse	18	26		
child	6	22		
Others	10	14		
Occupation			2.828	.587
Unemployed	11	16		
Government official	3	9		
Businessman/self employed	7	7		
Retired	11	24		
Others	2	6		
Education			8.475	.076
No education	0	2		
Elementary school	6	11		
Primary school	6	2		
Secondary school	11	16		
College/University	11	31		

stroke survivors. In addition, Dhamoon et al. [11] reported that older age was a consistent predictor of a decrease in quality of life over time across all domains of stroke survivors.

For mastery of roles during a stroke, they stated that the average role mastery score was 8.24 (SD = 3.46), which still stated that almost half (39.60%) of stroke patients said mastery of their role not good. The role function focused on the role of the person in the society and the roles within the group [12]. The example of the role of the stroke patient was to conduct activities of daily living as soon as possible [13]. Mastery also defined as a sense of having control over the forces that affect one's life, is an important component of psychological health and well-being across the lifespan [14]. This results were accordance with previous study found that the majority of the male stroke patients had a low sense of control [15]. This finding was supported by Cooper and Guillebaud

[16] who reported that when a disability occurs, there might be multiple life changes, including loss of independence, employment, and status in the family.

For well-being of relationship, the average well-being of relationship score was 34.90 (SD = 3.675), and there are still those who say almost half (35.40%) of their well-being was not good. Well-being of relationships could be reflected by family cohesiveness, family expressiveness, and family conflict [17]. The relationship between the patients and their spouse is disturbed after a stroke, and it influences to well-being. As Forsberg-Wirleby, Moller, and Blomstrand [18] found that the spouses' well-being was significantly lower in the first weeks after their partner's stroke. Previous studies had mentioned the impact of a stroke on the well-being of relationships. Patients with a stroke experience a change in all aspects of their life, such as in the physical, social, psychological, and spiritual domains. These changes in all aspects of stroke patients influence their well-being of the relationships with their family members. Family caregivers experienced lower relationship satisfaction and significantly predictive depression scores on the discharge of the stroke patient [19].

From the relationship analysis it was found that there was no relationship between demographic characteristics between age, sex, occupation, and respondent's education with subjective well-being, mastery of roles and welfare of respondents' relationships ($p > 0.05$), but there was a relationship between subjective well-being and respondents' relationships with family ($p < 0.05$). With the results of the analysis, this shows that the age, sex, occupation, and education of the respondents did not affect the conditions of subjective well-being, mastery of roles and welfare of relations. However, from the results of the analysis, it was pointed out that the relationship with respondents would affect subjective well-being, this can occur because subjective well-being was a feeling of well-being felt by the respondent who was personal. This feeling will be determined by how much support others have given him. This result was supported by several previous studies which stated that family support was very useful in the rehabilitation process of stroke patients. Therefore, it was necessary to strengthen the family and prepare the family to be able to support stroke patients effectively and efficiently in order to improve the welfare of stroke patients.

5. Conclusions

Based on the results of this study it can be concluded that: The stroke patients who are outpatient at the hospital undergo rehabilitation still experience problems and subjective health, role mastery, and relationship well-being. There was no relationship

between demographic characteristics between age, sex, occupation, and respondent's education with subjective well-being, mastery of roles and welfare of respondents' relationships. However, there was a relationship between subjective well-being and respondents' relationships with family. The suggestions that can be conveyed in this study are: Steps needed effective measures to help stroke sufferers to improve well-being, mastery of the role and well-being of their relationships. The steps are in the form of a program or model that can be applied by nurses to strengthen family support for stroke patients after stroke patients are outpatient (the rehabilitation phase after stroke is not good enough).

6. Limitation

In this study the limitations faced were that this research has only revealed subjective well-being, role mastery, and well-being of relationship and its relation to demographic characteristics, regarding the samples it's not cover for all patient in Bandung but it's only patients who attend in certain hospital in Bandung.

Disclosures

The authors report no real or perceived vested interests that relate to this article that could be construed as a conflict of interest.

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References

- [1] World Health Organization [WHO] (2012). *World health statistic 2012*. Switzerland: World Health Organization, (www.who.int). 20 Avenue Appia, 1211 Geneva 27.
- [2] Departemen Kesehatan.(2013). *Riset kesehatan dasar (RISKESDAS) 2013*. Jakarta: Badan Penelitian dan Pengembangan Kesehatan Departemen Kesehatan, Republik Indonesia.
- [3] Chau, J. P., Thompson, D. R., Chang, A. M., Woo, J., Twinn, S., Cheung, S. K., & Kwok, T. (2010). Depression among Chinese Stroke survivors six months after discharge

- from a rehabilitation hospital. *Journal of Clinical Nursing*, 19(21-22), 3042-3050. doi:10.1111/j.1365-2702.2010.03317.x
- [4] Capistrant, B. D., Wang, Q., Liu, S. Y., & Glymour, M. M. (2013). Stroke-associated differences in rates of activity of daily living loss emerge years before stroke onset. *Journal of the American Geriatrics Society*, 61(6), 931-938. doi:10.1111/jgs.12270
- [5] Clarke, P., Marshall, V., Black, S. E., & Colantonio, A. (2002). Well-being after stroke in Canadian seniors: Findings from the Canadian study of health and aging. *Stroke*, 33(4), 1016-1021.
- [6] Norris, M., Allotey, P., & Barrett, G. (2012). 'It burdens me': The impact of stroke in central Aceh, Indonesia. *Sociology Health Illness*, 34(6), 826-840. doi:10.1111/j.1467-9566.2011.01431.x
- [7] Anderson, C. S., Linto, J., & Stewart-Wynne, E. G. (1995). A population based assessment of the impact and burden of caregiving for long-term stroke survivors. *Stroke*, 26(5), 843-849. (International Wellbeing Group, 2013).
- [8] Diener, E., Oishi, S., & Lucas, R. E. (2002). *Subjective well-being: The science of happiness and life satisfaction*. In C.R. Snyder & S.J. Lopez (Ed.), *Handbook of Positive Psychology*. Oxford and New York: Oxford University Press.
- [9] Moos, R. H., & Moos, B. S. (1981). *Family Environment Scale manual*. Palo Alto: Consulting Psychologists Press.
- [10] (Clarke, Marshall, Black, & Colantonio, 2002; Dhamoon et al., 2014; Nilsson, Axelsson, Gustafson, Lundman, & Norberg, 2001).
- [11] Dhamoon, M. S., McClure, L. A., White, C. L., Lau, H., Benavente, O., & Elkind, M. S. (2014). Quality of life after lacunar stroke: The secondary prevention of small subcortical strokes study. *Journal of Stroke and Cerebrovascular Diseases*, 23(5), 1131-1137. doi:10.1016/j.jstrokecerebrovasdis.2013.09.029
- [12] Parker, M. E. (2005). *Nursing theories and nursing practice*. Second edition. Philadelphia.
- [13] Smeltzer, S. C., Bare, B. G., Hinkle, J. L., & Cheever, K. H. (2010). *Brunner and Suddarth's textbook of medical-surgical nursing* (12th ed.). Philadelphia: Lippincott Williams & Wilkins.
- [14] Conger, K. J., Williams, S. T., Little, W. M., Masyn, K. E., & Shebloski, B. (2009). Development of mastery during adolescence: The role of family problem-solving. *Journal of Health and Social Behavior*, 50, 99-114.
- [15] Kim, J. H., & Kim, O. (2008). Influence of mastery and sexual frequency on depression in Korean men after a stroke. *J Psychosom Res*, 65(6), 565-569. doi:10.1016/j.jpsychores.2008.06.005

- [16] Cooper, E., & Guillebaud, J. (1999). *Sexuality and disability: A guide for every day practice*. Abingdon: Radcliffe Medical Press.
- [17] Phipps, S., & Mulhern, R. K. (1995). Family cohesion and expressiveness promote resilience to the stress of pediatric bone marrow transplant: A preliminary report. *Journal of Developmental & Behavioral Pediatrics, 16*(4), 257–263.
- [18] Forsberg-Warleby, G., Moller, A., & Blomstrand, C. (2004). Life satisfaction in spouses of patients with stroke during the first year after stroke. *Journal of Rehabilitation Medicine, 36*(1), 4-11.
- [19] McPherson, C. J., Wilson, K. G., Chyurlia, L., & Leclerc, C. (2011). The balance of give and take in caregiver-partner relationships: An examination of self-perceived burden, relationship equity, and quality of life from the perspective of care recipients following stroke. *Rehabilitation Psychology, 55*, 194-203.