Analysis of Family Independence in Home Care in Post Stroke Clients

Yaslina, Lisa Mustika Sari, Nova Mustika*, Diva SandyraPerintis Indonesia University, West

Sumatra, Indonesia

*Corresponding author

ABSTRACT

Family is the main source of care at home. In reality, families are not yet independent in post-stroke care at home, this can be due to family characteristics, family support, and burden. This study aimed to identify family independence in post-stroke care at home which was associated with family characteristics, support, and coping. The research design was a cross-sectional. The research was conducted at the Neurology Poly with a sample of83 respondents and the sampling technique was Purposive Sampling. The instrument in this study was the Multidimensional Scale of Perceived Social Support (MSPSS), Crisis Oriented Personal Evaluation Scale, and Family Independence and social demographic questionnaire. The results of the study found that more than half of the respondents were young adults, had secondary education, and had jobs, low family independence, maladaptive coping, and low family support. There was no relationship between family characteristics (age, education, occupation) with family independence and there is a relationship between coping and family support with independence in post-stroke care at home. It was suggested that families can increase their independence in post-stroke care by having support groups or stroke self-help groups and increasing the role of community nurses through home visits to families.

Keywords: Independence, Family, Care, At Home, Post Stroke

PRELIMINARY

Every year there are 15 million people worldwide who have a stroke. Of these, around five million people died, and five million experienced permanent disability (Cassidy et al, 2013). In Indonesia, stroke (21.1%) and heart disease (12.9%) are the number one and second biggest killers of all deaths in Indonesia (Arianie, 2018). The prevalence of stroke events in West Sumatra diagnosed by health workers in 2013 was 12.2 per thousand and in 2018 it was 10.8 ‰ (Ministry of Health RI, 2018). Several research results found that there was an increased incidence of stroke in young adults (Smajlovi?. D, 2015).

World Health Organization (WHO) defines stroke as a focal or global functional brain disorder due to disruption of the cerebral blood circulation that lasts more than 24 hours or can cause death (The Royal College ofPhysicians, 2012). The Indonesian Ministry of Health (2019) states that a stroke is reduced blood flow to thebrain caused by a blockage or cut off of blood vessels which can lead to the death of brain cells (http://p2ptm.kemkes.go.id/, accessed in 2019).

Stroke has an impact on sufferers, families, communities, and even countries. The impact on the client itself canbe physical, psychosocial, and economic. Stroke is the leading cause of disability in the United States (Belmont, JC, 2020).

Stroke attacks occur acutely or suddenly. Stroke clients in the acute phase must be hospitalized. Qubra et al.,

(2010) stated that stroke sufferers are usually hospitalized until their health conditions stabilize for about 2 to 3 weeks and then they return home to be cared for by their families or caregivers. Post-stroke clients who are sent home have mostly experienced significant recovery before being sent home, some still need help getting out of bed, wearing clothes, eating, and walking, sometimes requiring a trained care facility or participating in arehabilitation program, or becoming a resident of the house (Valery, 2006).

Kumar, Kaur, and Reddema (2015) stated that caregivers experience a higher level of burden. The burden is significantly correlated with coping strategies and 42.56% of caregivers use low coping strategies, namely denying. The results of a systematic review study conducted by Ramazanu, Loke, and Chiang (2020) on post- stroke client pairs found a lack of coping strategies for post-stroke client partners where the coping strategies they adopted were avoiding, reacting passively, and expressing emotions. The results of the study by Pesantes et al. (2017) stated that almost all caregivers stated that they needed to see health workers to improve their mental health. Families experience quite a heavy burden (Anderson, Linto, and Wynne. 1995, Miler et al., 2010).

Good family ability to care for post-stroke family members can show family independence. Family independence is defined as the ability of families to care for family members at home, and to take action to meet the physical, psychological, social, and spiritual needs of family members (Friedman, Bowden, and Jones, 2003). Family independence is one of the focuses of assessment in family nursing care. Nurses can evaluate family independence by referring to the implementation of family health duties as part of an effort to achieve a healthy family with effective communication and family coping strategies (Hayati, 2018; Maglaya, 2009).

Thus, the caregiver or family is often the person responsible for treatment or reintroduction, coordinating community services, and providing instrumental and emotional support to the client also the important role played by the caregiver or family is the navigator of the systems that locate, evaluate, and integrate knowledge and information obtained (Byrne, Orange, & Ward-Griffin, 2011). The existence of family involvement in the care of family members is expected to increase the ability of families in post-stroke care so that family independence can also be achieved through the role played by nurses. Not all family members can continue the program or home care such as the physical exercise that the patient needs. They may have no resources or experience economic and energy instability from a stroke in their family. Yasmina, Ice, and Kartika's research (2020) found that there was an effect of nurse visits at home on post-stroke family independence, where it was found after the visit that the average level of family independence was level III independence. Therefore this study aims to identify factors that influence family independence in post-stroke care at home.

RESEARCH METHODS

This study used a quantitative research design with the cross-sectional method. This research was conducted in Otak Muhammad Hatta Hospital, especially in the Neurology Poly. This research was conducted from February to April 2022. There were 83 respondesnts in this study. Sampling was done by purposive sampling technique.

This study used a data collection tool in the form of a questionnaire. For the dependent variable using the family independence questionnaire (Hayati, 2018) the researcher further modified the independent variable using a questionnaire related to the socio-demographic data of the respondents, the Family Koing Questionnaire, namely the F-Copes Family Crisis Oriented Personal Evaluation Scale (McCubbin, Olson and Larsen, 1987, in Friedman, Bowden and Jones, 2003; Guada, 2012), Questionnaire Multidimensional Scale of Perceived Social Support (MSPSS). (Zimet et al. , 1998) .

The data collection process was carried out after the letter of introduction came out from LPPM Perintis University of Indonesia, then the researcher brought the cover letter to the hospital. National Brain

ask permission to do research at the Poly Neurology. Each respondent who met the inclusion criteria was included in the sample namely: Families who live with clients, Families involved in client care, and can write and read. . Then the researcher asked about the willingness of the prospective respondents to become the research sample,For those who were willing to be sampled, they were asked to sign an informed consent as proof of their willingness to be sampled. After the data was collected, the data is processed and analyzed with the Chi-Square Test.

RESULTS

Table I. Distribution of Family Characteristics of Post-Stroke Clients (n=83)

No	Client characteristics Age:	Number	Percentage (%)
1	Young adults	36	43.5
2	Middle adult	37	44.6
3	Elderly	10	12.0
	Total	83	100
No	**Client characteristics Level of education :**	**Amount**	**Percentage (%)**
1	Tall	22	26,5
2	Prevent	47	56,6
3	Low	14	16,9
	Total	83	100
No	**Client characteristics Profession :**	**Amount**	**Percentage (%)**
1	Working	72	86,7
2	Doesn't work	11	13,3
	Total	83	100
No	**Client characteristics Family independence :**	**Amount**	**Percentage (%)**
1	Tall	34	40,9
2	Low	49	59,1
	Total	83	100

Based on Table 1 regarding the distribution of family characteristics of post-stroke clients (age, education,occupation), it can be seen that more than half are young adults (54.4%), secondary education (56.6 %), lowfamily independence (59.1%) and some large family has a job (86.7 %).

Table 2. Statistical Test Results for Factors Affecting the Independence of The Client's Family After Stroke(n=83)

No	Data Age :	n	(%) p-value
1	Young adults	36	43.5
2	Middle adult	37	44.6
3	Elderly	10	12.0
			0,332
	Total	83	100
No	**Data Level of education :**	**n**	**(%) p-value**
1	Tall	22	26,6
2	Intermediate	47	56,6

No	Data	n	(%) p-value
3	**Low**	14	16,9
			0,843
	Total	83	100
No	Data Profession:	n	(%) p-value
1	Working	72	86,7
2	**Doesn't work**	11	3,3
			0,745
	Total	83	100
No	Data Coping :	n	(%) p-value
1	Adaptive	34	40,9
2	Adaptive Mall	49	59,1
			0,000
	Total	83	100
No	Data Family support :	n	(%) p-value
1	High	41	49
2	Low	42	51
			0,036
	Total	83	100

Based on Table 2, the results of the bivariate analysis show that the factors related to family independence in post-stroke care are coping and family support (value = 0.000 and 0.036).

DISCUSSION

The stroke recovery process causes clients to need further care at home or other settings such as intermediate care facilities, or rehabilitation facilities (Lewis et al., 2007). Stroke causes physical impairment or disability (Ghani, Mihardja, and Delima (2015). Post-stroke client care at home is aimed at the client's ability to carry out daily activities related to self-care and prevention of recurrent stroke attacks through control. risk factors (Mulyasih& Ahmad, 2008). The family has a large role in the recovery of family members after a stroke (Andrew et al., 2015; McCullagh et al., 2005; Tosin 2017).

The results of this study found that more than half of family independence was low (59.1%). The results of this study are in line with the results of a study (Creasy et al, 2015) which stated that most post-stroke clients would be cared for at home by family caregivers with limited abilities. The results of research by Yaslina, Sahar, and Rekawaty (2011) on post-stroke client families in Bukittinggi City found that almost half of the families (49.3%) had less post-stroke care at home. Other research related to family involvement in post-stroke care found that low levels of involvement in care planning (Monaghan, Channell, McDowell, & Sharma, 2005) often result in various kinds of unmet needs such as lack of information about the recovery process, sequelae, and strategies to meet the needs of post-discharge clients (Creasy et al, 2015).

The results of this study found that there was no relationship between age, education, and work with family independence in post-stroke care at home. Age was related to the period that has been passed by a person to acquire knowledge including knowledge of caring for stroke patients. This condition is because the majority of families with stroke sufferers in this study are of productive age. Productive age is the stage where people workto produce something for themselves and others. A person's level of education can vary because several factors influence education, namely individual motivation, social, economic, cultural, and parental motivation. Theresults of the study were not in line with the research of Minarti (2006) who found that there

was a relationship between the level of education and the independence of post-stroke clients, the higher the level of education, the more independent the client was and vice versa. Gray, 1996 Friedman et al. (2003) stated that family self-care behavior can develop through a combination of social and cognitive experiences that have been learned through interpersonal relationships, communication, and culture that are unique to each family.

Post-stroke client self-care includes: eating, wearing clothes, elimination, bathing, personal hygiene, dressing up, walking or using assistive devices, and how to transfer (Icnatavicius& Workman, 2013). This situation makes stroke clients need support from their environment, especially the family. Family success in providing support to members. Families with stroke can speed up the recovery process of mobility, achievement in daily activities, and quality of life for clients (Lewis et al., 2007).

Furthermore, in this study, it was also found that almost half of family support was low (49%). This was in line with the results of Tosun and Temel's (2017) study which found that the length of time providing care for the health status of family members, and perceptions of social support had an effect on home care for familymembers with stroke. Post-stroke clients in care at home need support from the family but on the other hand, the family itself also needs to get support from their environment, this is because of the stress and burden on the family in caring for stroke clients. The results of Bakas (2014) found full support given to families reduced depression, and improved coping and family functioning.

Merluzzi et al. (2011) the existence of positive coping in the family will affect the self-confidence (self-efficacy) of the family and the family's ability to take good care of themselves. The results of this study found that family coping was related to independence in caring for post-stroke family members at home. Yu's research results, Jie Hu and Efird, (2013) that effective coping strategies improve the quality of family life. Family coping strategies function as vital processes or mechanisms that facilitate family functioning. Without effective family coping, affective function as well as socialization, economy, and health care cannot be achieved adequately (Friedman, Bowden, and Jones, 2003).

The results of research by Kuumar, Kaur, and Reddema (2015) stated that the coping strategies most used by caregivers or families of patients with stroke were acceptance, getting social support, solving problems, and seeking help regarding religious aspects.

The results of qualitative research conducted by Rahman et al . (2020) found that the coping strategies used by caregivers or families of stroke patients included changing life roles, self-motivation, sharing with others, crying, trying to forget things that happened, hoping that family members would be better, emotional suppression and self-blame alone. The study saw the experiences of caregivers in caring for stroke patients and focus on coping strategies carried out by caregivers. Experience does help health workers in providing services patients better support and resources for caregivers in treating stroke properly.

CONCLUSIONS

Community health care providers may need to help caregivers or families reinforce effective strategies (planning, active coping, and seeking instrumental and emotional support) and change unfavorable coping strategies (venting, denying, and blaming you). Families are expected to get help and related care information from health workers during the disease.

THANK-YOU NOTE

Bukittinggiwho have permitted to do this research

3. All parties that cannot be mentioned one by one have supported the implementation of this research.

BIBLIOGRAPHY

1. Aller, MB et al. (2013) . Factors associated with experienced continuity of care between primary and outpatient secondary care in the Catalan public healthcare system. Gaceta Sanitaria ..https://sci-hub.se/10.1016/j.gaceta.2012.06.011 . Retrieved 02 April 2020.

2. Bakas, T. et al. (2014) 'Evidence for stroke family caregivers and dyad interventions: A statement for healthcare professionals from the American Heart Association and American Stroke Association', Stroke, 45(9), pp. 2836–2852. doi 10.1161/STR.0000000000000033.

3. Balitbangkes (2013). Basic Health Research 2013. Health Research and Development Agency, Indonesian Ministry of Health. Jakarta.

4. Balitbangkes (201 8). Basic Health Research in 201 8. Health Research and Development Agency, Indonesian Ministry of Health. Jakarta.

5. Baker, R. et al. (2020). Primary medical care continuity and patient mortality':, British Journal of General Practice .. https://bjgp.org/content/70/698/e600.short. Accessed 5 June 2020.

6. Berman, AT, Snyder, S. and Frandsen, G. (2016) Kozier &Erb's fundamentals of nursing, Pearson.

7. Blais, K.K et al,. (2002). Professional nursing practice: Concepts and Perspectives(4th ed.). New Jersey: Pearson Education

8. Boehme, A. K., Esenwa, C. and Elkind, M. S. V. (2017) 'Stroke Risk Factors, Genetics, and Prevention', Circulation Research. doi 10.1161/CIRCRESAHA.116.308398.

9. Creasy, K. R. et al. (2015).Clinical Implications of Family-Centered Care in Stroke Rehabilitation. Rehabilitation nursing : the official journal of the Association of Rehabilitation Nurses, 40(6), pp. 349–359. https://sci-hub.se/10.1002/rnj.188..Diaksestanggal 25 Juni 2020.

10. Friedman, Bowden, J. (2018) Friedman.pdf. United States of America: F.A Davis Company.

11. Friedman, MM, Bowden, VR, & Jones., EG (2003). Family nursing: Research, theory, & practice (6th ed.). Connecticut: Appleton & Lange

12. Ghani, L. Mihardja, LK and Delima, D. (2016) . Dominant Risk Factors for Stroke Patients in Indonesia. Health Research Bulletin. https://www.neliti.com/publications/20146/Factor-risiko-dominan-penderita- stroke-di-indonesia. Retrieved 29 March 2020.

13. Biological. YS, Kamso.S, Sahar.,J.(2018). Development of instruments to measure family independence in caring for the elderly. University of Indonesia.Dissertation.

14. Ignatavicius, D.D., & Workman, M.L. (2013). Medical surgical nursing: Patient-centered collaborativecare (7th ed.). St. Louis, Missouri: Elsevier Saunders.

15. Lewis, S. L. et al. (2010). Medical-Surgical Nursing: Assessment and Management of Clinical Problems.6th ed.). St. Louis, Missouri: Elsevier Saunders.

16. McCullagh, E. et al. (2005). Determinants of caregiving burden and quality of life in caregivers of stroke patients. Stroke, https://www.ahajournals.org/doi/full/10.1161/01.STR.0000181755.23914.53. Diaksestanggal 14 Agustus 2020.

17. Merluzzi, T. V. et al. (2011).Assessment of self-efficacy for caregiving: The critical role of self-care incaregiver stress and burden. Palliative and Supportive Care. https://search.proquest.com/openview/ e6cda4fb776cbefd5f9057e5c1d15e7c/1?pq- origsite=gscholar&cbl=39238. Diaksestanggal 26 Oktober 2020.

18. Miller, E.T. (2007). Transient Ischemic Attack and Stroke in Older Adults; Implementing Evidence-BasedInterventions, http// www.cinahl.com, diaksestanggal 2 Oktober, 2020.

19. Miller, E. L. et al. (2010). Comprehensive overview of nursing and interdisciplinary rehabilitation care of the stroke patient: A scientific statement from the American heart association, Stroke. https://www.ahajournals.org/doi/full/10.1161/STR.0b013e3181e7512b. Diaksestanggal 13 Juni 2020.

20. Mulyasih, E, & Ahmad. A. (2008). Stroke :Petunjukperawatanpasienpasca stroke di rumah . Jakarta: Balai Penerbit FK UI.

21. Pesantes, M. A. et al. (2017) 'An exploration into caring for a stroke survivor in Lima, Peru: Emotional impact, stress factors, coping mechanisms and unmet needs of informal caregivers, eNeurologicalSci.Elsevier B.V., 6, pp. 33–50. doi 10.1016/j.ensci.2016.11.004.

22. Qupra,R, et al,.(2010). Effectiveness of Supportive Educative Learning ProgrameOn The Level of Strain Experienced By Caregivers of Stroke Patients in Thailand. http// www.cinahl.com, diaksestanggalAgustus , 2020.

23. Smajlovi?, D. (2015) 'Strokes in young adults: Epidemiology and prevention. Vascular Health and Risk Management. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4348138/. Dikasestanggal 21 Mei 2020.

24. Yu, Y. et al. (2013). Social support, coping strategies, and health-related quality of life among

25. primary caregivers of stroke survivors in China. Journal of Clinical Nursing.https://onlinelibrary.wiley.com/doi/abs/10.1111/jocn.12251. Diakses 30 Agustus 2020.

26. Zimet, G. D. et al. (1988) 'The Multidimensional Scale of Perceived Social Support', Journal of Personality Assessment, 52(1),. https://www.tandfonline.com/doi/abs/10.1207/s15327752jpa5201_2. Diakses 12 mei 2021