



RESEARCH ARTICLE

Article URL: <https://ojs.poltekkes-malang.ac.id/index.php/HAJ/index>**Relationship Symptom Management Family as Caregivers of Post-Stroke Through Dorothea Orem's****Dewi Wulandari^{1(CA)}, Ixora², Elok Yulisaningsih³**^{1,2,3} Departement of Nursing, Poltekkes Kemenkes MalangCorresponding author's email (CA): dewi_wulandari@poltekkes-malang.ac.id**ABSTRACT**

The aim of this study was to determine the relationship between symptom management by families as caregivers and the independence of Activities of Daily Living post-stroke clients at the Gondang Community Health Center in Tulungagung Regency using Dorothea Orem's theoretical. The research design was correlational with a cross-sectional approach. Independent variable of family symptom management. Dependent variable of ADL independence of post-stroke patients. The study population of families of Post-Stroke sufferers in the Gondang Community Health Center area with a total of 30 stroke from January 2024 to March 2024, with a Saturated Sampling technique. The research instrument was a questionnaire, data analysis using the Spearman Rho test technique. The results of the study showed that most of the respondents carried out symptom management on post-stroke clients, namely 22 people (73.3%), as many as 12 respondents (40%) of their ADL independence were in the severe dependency category, as many as 10 respondents (33.3%) in the moderate category and as many as 7 respondents (23.4%) in the mild category. There is a relationship between symptom management by families as caregivers and ADL independence of post-stroke clients through the Dorothea Orem theory approach at the Gondang Community Health Center ($0.002 < 0.05$).

Keyword : Symptom management; ADL independence; family; caregiver; stroke

Copyright © 2024 by authors. This is an open access article under the CC BY-SA License (<https://creativecommons.org/licenses/by-sa/4.0/>)**INTRODUCTION**

According to the World Health Organization (WHO) in 2018, stroke is one of the main health problems in the world. Stroke is the third leading cause of death, after cancer and heart disease. Deaths from stroke have increased, in 2013 there were 5.5 million people died and increased by 12% in 2018 to around 14 million people. Stroke is one of the main health problems in the world. Stroke is the third leading cause of death, after cancer and heart disease. Deaths from stroke have increased, in 2013 there were 5.5 million people died and increased by 12% in 2018 to around 14 million people {Formatting Citation}. The problems experienced by stroke patients are usually long-lasting, requiring home care. Complications that can arise from prolonged bed rest include falls, contractures, pain,

depression, and pressure ulcers. Therefore, it is crucial to teach stroke patients about symptom management (2).

Symptom management is a treatment provided to improve the quality of life for patients with serious, life-threatening illnesses. Symptom management is crucial for stroke patients because stroke is a chronic disease with numerous symptoms, which vary from patient to patient (3). The ability to manage symptoms will increase the client's readiness to face problems independently (4). Based on data from the Tulungagung District Health Office on non-communicable disease cases in the Disease Prevention and Control Division, 175 people died from stroke in 2016. In 2017, the number of stroke deaths increased to 192. The quality of life of families with stroke will be impacted, affecting their lifestyle, psychological well-being, and spirituality (5).

The attention of the family as a caregiver is important because the success of treatment and care for stroke patients cannot be separated from the help and support provided by the caregiver (6). Family caregivers can have different experiences when caring for stroke patients at home.

Dorothea Orem emphasized the idea that a nurse is "Self." This idea was later developed in her nursing concept of "Self Care." Orem developed her nursing concept of "self care" and in 1971 published *Nursing: Concepts of Practice*. In the first edition, the focus was on the individual, while the second edition (1980) expanded to include multi-person units (families, groups, and communities). In the third edition (1985), Orem presented the General Theory of Nursing, and in the fourth edition (1991), Orem placed greater emphasis on children, groups, and communities. Orem developed the Self Care Deficit theory, which includes three related theories: 1) Self Care, 2) Self Care Deficit, and 3) Nursing System. These three theories are connected by six central concepts: self care, self care agency, therapeutic self care needs, self care deficit, nursing agency, and nursing system, as well as one peripheral concept: basic conditioning factors. The postulate of self-care theory states that self-care depends on learned behavior, individuals take the initiative and form their own behavior to maintain their life, health and well-being (7).

Based on the description above, the author is interested in conducting research on the relationship between symptom management by the family as a care giver and the independence of ADL in post-stroke clients using Dorothea Orem's theoretical approach.

METHODS

The research design used in this research is a correlational study with a cross-sectional approach. The independent variable in the study was family symptom management. The dependent variable was post-stroke patients' ADL independence. The population in this study was the families of post-stroke patients in the Gondang Community Health Center area, with data collected from January 2024 to March 2024 totaling 30 stroke patients. The sampling method used was non-probability sampling, using a saturation sampling technique. This method was chosen due to the small population size of 30.

The data collection method is the procedure used to collect data and to test the data collection instruments. The primary data in this study were obtained using questionnaires. The family symptom

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management questionnaire for stroke patients consisted of 20 items measured using a Likert scale with the following response options: a score of 4 for “always,” a score of 3 for “often,” a score of 2 for “sometimes,” and a score of 1 for “never.” This questionnaire was tested for validity and reliability by the researcher, yielding a validity coefficient of > 0.296 ($n = 30$) and a Cronbach’s alpha reliability coefficient of 0.921. Therefore, the questionnaire with 24 items was categorized as reliable. The Activities of Daily Living (ADL) independence questionnaire used the Barthel Index, which functions to measure functional independence in terms of self-care and mobility and can also be used as a criterion for assessing functional ability in patients experiencing balance disorders. It consists of 10 indicators, namely: feeding, bathing, personal hygiene, dressing, urination, defecation, toilet use, transfer, mobility, and stair climbing. This questionnaire has a validity value of $r > 0.4438$ and a reliability coefficient of 0.884, with 10 assessment indicators.

Data analysis used the Spearman Rho test technique with the following conclusions drawn: If $p \text{ value} < 0,05$ means there is The relationship between symptom management by family as caregivers and ADL independence of post-stroke clients at Gondang Community Health Center, Tulungagung Regency using Dorothea Orem's theoretical approach. If $p \text{ value} > \alpha (0.05)$ means there is none the relationship between symptom management by the family as a caregiver and ADL independence of post-stroke clients at the Gondang Community Health Center, Tulungagung Regency through the Dorothea Orem theory approach which was approved by the health research ethics commission of Patria Husada Blitar Health College with the number 06/PHB/KEPK/333/10.25.

RESULT

Table 1 Respondent Characteristics

Gender	Amount	Percent
Man	14	46.67
Woman	16	53.33
Age	Amount	Percent
20-30 years	3	10
31-40 years	10	33.33
41-50 years	14	46.67
51-60 years	3	10
> 60 years	0	0
Education	Amount	Percent
Elementary School/Equivalent	2	6.67
Junior High School/Equivalent	9	30
High School/Equivalent	14	46.67
College	5	16.67
Connection	Amount	Percent
Husband and wife	18	60
Child	5	16.67
Parent	7	23.33
Grandparents	0	0
You	0	0
Nephew	0	0
Grandchild	0	0
Cousin	0	0
Another Family	0	0

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Based on the table above, it was found that of the total of 30 respondents, the majority of respondents were female, namely 16 respondents (53.3%), almost half of the respondents were aged 41-50 years, namely 14 respondents (46.7%) and almost half of the respondents had a high school education/equivalent, namely 14 respondents (46.7%).

Table 2. Management symptom management by the family as a care giver in post-stroke through the Dorothea Orem theory approach at the Gondang Community Health Center

Symptom management	Frequency	Percentage
Not doing symptom management	8	26.7
Performing symptom management	22	73.3

Based on table 2, it is known that of the total of 30 respondents, the majority of respondents carried out symptom management on post-stroke clients, namely 22 people (73.3%).

Table 3. Independence ADL of post-stroke patients at Gondang Community Health Center

ADL Independence	Frequency	Percentage
Total dependence	1	3.3
Heavy dependency	12	40
Moderate dependence	10	33.3
Mild dependence	7	23.4

Based on table 3, it is known that of the total of 30 post-stroke patients, almost half of the respondents' ADL independence was in the severe dependency category, namely 12 respondents (40%).

Table 4. Relationship Symptom management by the family as a caregiver with ADL independence for post-stroke clients through the Dorothea Orem theory approach at the Gondang Community Health Center

Symptom management	ADL Independence/Dependence								Total	
	Light		Currently		Heavy		Total			
	F	%	F	%	F	%	F	%	F	%
Performing symptom management	7	23.3	9	30	6	20	0	0	22	73.3
Not doing symptom management	0	0	1	3.3	6	20	1	3.3	8	26.7
Amount	7	23.3	10	33.3	12	40	1	3.3	30	100
Spearman Rho statistical test	<i>P Value</i> = 0.002								α = 0.05	

The results of the study in Table 4 show that of the 30 respondents, nearly half of the families of 9 (30%) performed symptom management and ADL independence for post-stroke patients in the moderate dependency category. Meanwhile, 6 (20%) respondents did not perform symptom management and ADL independence for post-stroke patients in the severe dependency category.

The results of quantitative data analysis with the Spearman Rho statistical test assisted by the SPSS computer program can be interpreted as the results of the Spearman Rho statistical test with a significance of 0.05 producing a *P Value* = 0.002 smaller than the value of α = 0.05 ($0.002 < 0.05$) so that H_0 is rejected and H_1 is accepted, which means there is a relationship between

symptom management by the family as a care giver and the independence of ADL of post-stroke clients through the Dorothea Orem theory approach at the Gondang Community Health Center.

DISCUSSION

Based on Table 2, it is known that of the total of 30 respondents, the majority of respondents, namely 22 people (73.3%), performed symptom management on post-stroke clients. According to the persistent physical symptom management is care provided to improve the quality of life of patient with serious and life-threatening illnesses and These symptoms constitute a growing global burden in terms of years lived with disability and disability adjusted life years. Symptom management is very important to teach to clients who have experienced stroke because stroke is a chronic disease with many symptoms and complaints from clients vary from time to time.(3).

According to Orem, self-care is an individual's activity aimed at meeting their survival needs, maintaining their health, and promoting their well-being, whether healthy or ill. Dorothea E. Orem introduced the self-care nursing theory in 1971, known as the self-care deficit nursing theory (SCDNT). This theory became the first nursing model developed. Based on Orem's theory, the model consists of the following three theoretical perspectives: self-care theory, self-care deficit theory, and nursing system theory. Orem's three SCDNT theories are connected by six central concepts: self-care, self-care agency, therapeutic self-care needs, self-care deficit, nursing agency, and nursing system, as well as one peripheral concept, the basic conditioning factor (12).

The large number of families who performed symptom management for post-stroke patients at the study site indicates that families recognize the importance of symptom management in post-stroke recovery. This symptom management may be motivated by the family's hope for the stroke patient's recovery (13). Families who performed symptom management for post-stroke patients at home may include husbands, mothers, fathers, in-laws, and other relatives. This symptom management may be initiated by one or all of the family members who accompany the post-stroke patient (14).

Based on table 3, it is known that of the total of 30 post-stroke patients, almost half of the respondents' ADL independence was in the severe dependency category, namely 12 respondents (40%).

Independence is the ability or state in which an individual is able to manage or address their own needs without relying on others. Activities of Daily Living (ADL) is a measure of activities carried out routinely by humans every day (15). These activities include: cooking, shopping, caring for/taking care of the house, washing, managing finances, taking medication, and using transportation. The ADL scale consists of basic ADL or Basic Activity of Daily Living (BADL), Instrumental or Intermediate Activity of Daily Living (IADL), and Advanced Activity of Living (16).

Post-stroke patients who experience severe dependency in performing ADLs indicate that stroke patients require significant assistance from others in their daily activities. This dependency can occur

due to the patient's physical condition, such as weakened muscle strength and poor balance. It can also be due to mental health issues such as grief or depression, or a lack of family support. If these ADLs are not practiced, the patient will be unable to perform them. Stroke patients will experience increasingly severe dependency. Proper exercise is essential to reduce dependency and to improve their physical condition to accelerate recovery. Furthermore, a small percentage of stroke patients experience only mild dependency in performing ADLs. This may be because their stroke was mild and not paralyzing, meaning they don't require significant assistance with ADLs (17).

The results of the study in Table 4 show that of the 30 respondents, nearly half of the families of 9 (30%) performed symptom management and ADL independence for post-stroke patients in the moderate dependency category. Meanwhile, 6 (20%) respondents did not perform symptom management and ADL independence for post-stroke patients in the severe dependency category.

The results of quantitative data analysis using the Spearman Rho statistical test with the help of the SPSS computer program can be interpreted as the results of the Spearman Rho statistical test with a significance of 0.05 producing a P Value = 0.002 which is smaller than the value $\alpha = 0.05$ ($0.002 < 0.05$) so that H_0 is rejected and H_1 is accepted, which means there is a relationship between symptom management by the family as a care giver and the independence of ADL of post-stroke clients through the Dorothea Orem theory approach at the Gondang Community Health Center.

Families play a crucial role in supporting the independence of stroke patients. This is because families foster closeness and attachment, both physical and emotional. Dependence in stroke patients is often caused by physical and mental limitations, mental states such as sadness and depression, acceptance of bodily functions, a preference for assistance in certain activities but independence in others, and a lack of family support (18). Symptom management by families in post-stroke patients will enable stroke patients to feel happy and receive support from their families in learning to be independent, thus fostering a high spirit for life and a speedy recovery (19). One approach involves learning to be independent in their activities with minimal need for assistance from others or family. Therefore, family symptom management is crucial for supporting the independence of older adults in maintaining their physical and mental health, thereby improving the health and quality of life of stroke patients (17).

This study supports research conducted by Sujati et al., who found that post-stroke patients experienced problems including acute pain, sleep disturbances, and impaired physical mobility. After undergoing massage therapy, dhikr therapy, and RoM, the clients experienced decreased pain complaints, decreased frequent awakenings, and increased extremity movement. Management of pain symptoms, sleep disturbances, and mobility with massage therapy, dhikr therapy, and RoM interventions successfully improved daily activities such as pain complaints, sleep complaints, and impaired physical mobility in two stroke patients who experienced pain, sleep disturbances, and impaired physical mobility (20).

CONCLUSION

This study shows that the family, as caregivers, plays an important role in symptom management for post-stroke clients. The implementation of symptom management by families contributes to improving patients' independence in carrying out activities of daily living. Although some patients still experience limitations in ADL, active family involvement is shown to be associated with patients' ability to achieve better levels of independence. This relationship emphasizes that the quality of care provided by the family is a key factor in the recovery process of post-stroke patients.

The findings support the Self-Care Deficit Nursing Theory of Dorothea Orem, which emphasizes that individuals with limited abilities require assistance from care agents, in this case, the family. Through the supportive–educative system approach, families help patients meet self-care needs that they are unable to perform independently. Family-led symptom management helps reduce self-care deficits and promotes improved ADL independence, confirming the relevance of Dorothea Orem's theory as a conceptual foundation for family-based post-stroke care.

Nurses need to optimize the role of families in post-stroke nursing care through structured education and guidance. Applying an approach based on Dorothea Orem's theory can help families understand appropriate limits of assistance while gradually encouraging patient independence. Primary health care services should also develop caregiver empowerment programs to support continuity of home-based care. Future research is recommended to develop nursing interventions based on Dorothea Orem's theory and to test their impact on ADL independence in post-stroke patients. In addition, future studies may explore supporting and inhibiting factors in the family caregiver role using both quantitative and qualitative approaches to enrich understanding of family-based post-stroke care.

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