



## THE DECISION MAKING AND SEARCH FOR HEALTH ASSISTANCE ON ARRIVAL DURATIONS OF STROKE PATIENTS TO THE EMERGENCY DEPARTMENTS

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### ABSTRACT

Patients who experience signs and symptoms of stroke often occur delay to come to the hospital, the stroke has a time limit to get immediate help, the delays to take stroke patients to the hospital resulting in disability and paralysis. The purpose of this research was to determine the influence decision-making and health assistance to the long search arrival time ischemic stroke patients come into the ER, This research is a quantitative research design used is analytic with approach. *Cross-sectional* Sampling technique used is *purposive sampling* on families of stroke patients with the number of 60 respondents. The research location in the Regional General Hospital Jombang Indonesia. Data were analyzed using *Spearman rank*, test bivariate *Spearman Rank* decision is obtained ( $p = 0.000$ ), medical assistance obtained search results ( $p = 0.000$ ). The decision-making most of the respondents had to wait for another family to seek medical help so that the search was delayed medical assistance, medical assistance showed most respondents came to a public hospital after first faskes to advance. The conclusion of this research is a significant difference between the decision-making and medical assistance to the length of time the arrival of stroke patients to come to the ER.

**KEYWORDS:** Decision Making, Health Assistance, Ischemic Stroke.

### INTRODUCTION

Stroke is an emergency condition that should be addressed within the period of 3 - 4.5 hours. If exceeds the time stroke patients will suffer disability and even death (Mellor *et al.*, 2015).

Delays in *pre-hospital* cause of death and disability in stroke patients, the presentation data of deaths in the stroke patients pre hospital in the American states ranged 23% - 67%, and eight other states have a larger proportion of 60%. The study found that stroke accounted for the death of 68% in *pre-hospital*, and the rest are in the hospital (Williams *et al.*, 2009).

Some of factors delay stroke patients come to the hospital one of them is from the patient and family (Ellis, 2013). The other factor is the delay in seeking medical help (Yang *et al.*, 2014). Handling in *pre hospital* were quick to bring stroke patients to the hospital will minimize death and disability in stroke patients (Koutlas *et al.*, 2004).

Minimizing delays stroke patients to come to the hospital will increase the success of measures and increase *outcome* on the stroke (Yang *et al.*, 2014). The decision come to the hospital in stroke patients is influenced by the behavior of the family in health aid decision making significantly affect patient delay to come to the hospital.

### MATERIALS AND METHODS

This research used analytic design with cross-sectional approach. The research in Jombang, Indonesia. The research was held from 01<sup>st</sup> to March 29<sup>st</sup>, 2018. The samples were 60 family patients Ischemic Stroke in the Emergency Department selected by purposive sampling technique. The research instruments were questionnaires. Second is questionnaire to measuring health seeking pattern which is included decision making, health care choice. Decision making variable was means what family decide when their member had sign of stroke, the choice is not take to hospital and take to hospital. Seeking for health care variable is whether directly taken to the hospital or not, conducted by the family, buy self-administered medicine, buy medicine at pharmacies

according to medication ever taken, going to traditional medicine (alternative medicine or to shaman/dukun), to general physician practice, called for nurse/midwife for examination, to health center/clinic/hospital, calling the neighbors. (Bilic *et al.*, 2007., Faiz *et al.*, 2013, Fassbender *et al.*, 2013, Ashraf *et al.*, 2015). This

research types of analysis: univariate, bivariate,. The univariate analysis aimed to describe the characteristic of the research respondents, the bivariate analysis used Spearman rank correlation test with significant level ( $\alpha$ ) = 0.05.

## RESULTS

**Table 1: Characteristics of Respondents by Age, Gender, Education.**

Characteristics of Respondents	Frequency (n)	Percentage (%)
Age		
21-35 Years	31	51.7
36-50 Years	16	26.7
≥ 51	13	21.7
Total	60	100.0
Gender		
Female	32	53.3
Male	28	46.7
Total	60	100.0
Education		
Junior high school	5	8.3
Senior high school	32	53.3
University	23	38.3
Total	60	100.0

Source: Primary Data (2018)

From Table 1, Are showed that the majority of respondents are female (53.3%), age 20-35 years old (51.7%), education at Senior high school (53.3%).

**Table 2: Decision making and search health.**

Decision-making	Frequency (n)	Percentage (%)
delay seeking help	39	65.0
Yeah, looking for help	21	35.0
Total	60	100
Reasons delay seeking help		
Waiting for other family	39	65.0
Total	39	65.0

Search help		
Not directly to the hospital	39	65.0
Jump to the hospital	21	35.0
Total	60	100
Reasons Not directly to the hospital:		
Rest, buy new drugs to the hospital	2	3.3
Call your doctor / nurse / midwife, to the RS	2	3.3
break, to hospitals,	19	31.7
break to community health centers, clinics, hospitals to	9	15.0
to the doctor / nurse / midwife, rest, to rs	6	10.0
break, perawat.ke to the clinic, to rs	1	1.7
Total	39	65.0

Source: Primary Data (2018)

**Table 2: Spearman rank correlation test results between decision-making and the search for health assistance with the length of arrival of stroke patients coming to the ED.**

		The length of time of arrival			p-value
		3 hours	<= 3 hours a	correlation coefficient	
Decision Making	Not seeking help	28 (71.8%)	11 (28.2%)	0.594	0.000
Search	for assistance	2 (9.5%)	19 (90.5%)		
	Help directly to the RS	28 (71.8%)	11 (26.3%)	0.594	0.000
	Jump to the RS	2 (9.5%)	19 (90.5%)		
total		30 (50%)	30 (50%)		

Source: Primary Data (2018)

Table 2 shows that variable decision obtained by the statistical test of *Rank Spearman*  $p = 0.000$ , the correlation value of  $r = 0.594$ , indicating that the hypothesis (H1), which means there is indicated a significant relationship between the decision on the length of time of arrival of stroke patients come into the ED Hospital Jombang. Similarly, the health assistance.

## DISCUSSION

### The Relationship between decision-making and the search for health assistance with the length of arrival of stroke patients coming to the ED

The result of the bivariate analysis showed that there was a significant relationship between decision-making and the search for health assistance with the length of arrival of stroke patients coming to the ED.

Respondent considers perceived pain, signs and symptoms of a stroke suffered by family members only medicare so that members of his family were told to rest because there are no new changes were brought to the hospital, cause of stroke patients long to come to the hospital, the search for medical aid taken directly to the hospital will accelerate the handling in stroke patients than whiteen should wait for a break in advance or should stop by stop by the health service faskes first so that treatment of stroke patients will be long because they have to come to faskes first afterwards to the hospital.

The result of tabulation between decision making and length of time was found to result that by waiting for other family members will slow patient to come more than 3 hours (93.3%), but also there (36.7%) respondents who seek immediate health assistance but more arrival time from 3 hours in the hospital. In contrast to (36.7%) respondents who waited for another family decision but less than 3 hours to come to the hospital, and the results of the decision to seek medical assistance (63.3%) arrived on time less than 3 hours.

The majority of respondents seeking indirect help came to the hospital, research results in the field found that seeking help is not directly taken to the hospital and symptoms that are felt stroke patients are considered members of his family are just sick ordinary so that family members affected by stroke are told to rest. Rest performed in stroke patients because there is no change

of symptoms and signs caused even more severe pain so that should be taken to the hospital, because this is why long-term stroke patients come to the hospital.

The results of bivariate analysis of the relationship of seeking health assistance to bring stroke patients to the ER were no significant or significant relationship between the search for health assistance with the duration of the arrival of stroke patients to the ER.

The analysis also found a strong and positive relationship, where the search for health assistance brought directly to the hospital, will accelerate the handling stroke patients than patients who waiting for a rest first or should stop by the first health service faskes, so the handling of stroke patients it will take a long time to come the first faskes after new hospital.

The results field showed that search for indirect assistance to the hospital, because patients were told to take a rest it considers what the patient feels only ordinary illness and can heal itself proved by 31.7%, the next sequence of respondents seeking help after the break was taken to the puskesmas or new clinic brought to hospital 15%. In addition there is a search for health assistance that carried who bring patient after an indirect attack to the hospital was taken due to the nearest doctor/nurse/midwife and after that the patient was taken home because no new changes were brought to hospital by 10%.

The results obtained from the tabulation were about 63.3% of the families taking to hospital less than 3 hours and some more than 3 hours (6.7%) although not to the first place of the faskes whether to practice physician, clinic or calling the team health to come home. While the respondents who recommend a break in stroke patients after that just buy drugs and go to the hospital because no change in disease suffered there (6.7%) arrived in less than 3 hours.

Respondents who call the doctor / nurse / midwife first before coming to the hospital get (6.7%) cause to arrive late more than 3 hours. This is the same with the respondents who have to go to the doctor / nurse / midwife as well as rest at home after examination gives results (20.0%) arrived late to the hospital that is more than 3 hours.

The difference occurs when the respondent is taken to the hospital less than 3 hours when stroke patients are advised to rest beforehand by the family (26.7%) before being taken to the hospital. But the presence of a break in advance recommended by the family that took too long to come to the hospital more than 3 hours as much (36.7%).

In stroke patients who rest but not immediately taken to the hospital but taken to the clinic / to the hospital type d will experience delays, time is needed longer about (26.7%), is more than 3 hours of arrival this thing the same as the respondents who had to bring a stroke patient to come to the practicing doctor and then to puskesmas and new to the hospital (3.3%) came more than 3 hours arrived at the ER. Different conditions occur in stroke patients arriving in less than 3 hours or approximately (3.3%) because when at the puskesmas immediately in order to come to the hospital.

The selection to health service first faskes due to the respondents assume that the symptoms and signs that the stroke is a common disease and will recover by bringing or calling to a doctor, nurse or midwife who is closer to get health assistance. The selection of clinics or puskesmas due to the respondents assume that by coming to the clinic or closest clinic to save time and quickly handling.

Research carried out together with previous studies showed that delays in *pre hospital* is influenced by the quest for health assistance in accordance with the result of research (72%) of stroke patients or families visiting primary health care services in advance. The primary services visit is coming to a local doctor while (28%) came directly to the hospital, the time longer than directly to the hospital (Faiz *et al.*,2014).

Research in India said that the delay in stroke patients come to ER due to contact your local doctor beforehand than directly to the hospital with a substantial proportion of patients (51%). Contacts with the local doctor was associated with a significant delay (Ashraf *et al.*,2015).

Delay *pre-hospital* occurs because of the delay of the patients in 62.3% of patients with trepidation to seek medical help (Chang *et al.*,2004). The delay that occurs in stroke patients 54% did not seek help within 1 hour after the occurrence of symptoms because they think will heal by itself, 46% did not seek medical care (Fassbender *et al.*, 2013). Any decision of the family also plays an important role in the fast or not patients taken to hospital, in this case in accordance with the results of the study (Kautlas *et al.*,2004).

Decision families who do not immediately bring the patient to the hospital emergency room because they have to wait another family. Waiting for another family affects the delay in stroke patients come to the hospital (Bilic *etal.*, 2017).

Behavior associated with health seen from the level of health, safety, and life of a person is largely determined by behavioral factors. Behavior contributes to number two after environment to health status. The behavior of seeking health assistance in stroke patients is one important part that should be patient and family notice. as a form of efforts made to obtain treatment and treatment in stroke patients so that disability and death can be minimized (Hokmabadi *et al.*, 2018).

Delay in pre hospital one of them influenced by the search for health assistance in accordance with the results obtained (72%) stroke patients or families visit primary health care first. The primary services visited were attending a local doctor while (28%) came directly to the hospital, the time taken longer than directly to the hospital (Faiz *et al.*, 2014).

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The delay in pre-hospital was due to patient delays in 62.3% of patients with a doubt for seeking medical assistance (Chang *et al.*, 2004). Delay in stroke patients 54% did not seek help within 1 hour of the onset of symptoms because they thought they would recover by themselves, 46% did not seek medical treatment (Fassbender *et al.*, 2013).

Decision-making is the choice between alternatives of a way of acting that is the essence of planning (Koontz, *et al.*, 2012). Decision-making is a complex cognitive process and is often defined as an attempt to decide on a specific set of actions that focus on analyzing difficult situations (Marquis & Huston, 2010).

Family decision making also plays an important role in whether or not a patient is taken to the hospital, in accordance with the results of the study (Kautlas *et al.*, 2004). Family decisions that do not immediately take the patient to the hospital emergency room because they have to wait for another family. Waiting for other families to affect the delay in stroke patients coming to the hospital (Bilic *et al.*, 2017)

Behavior of delayed decision to hospital by family because of waiting attitude and see the existence of symptoms that will be lost alone. Seeing changes that will be lost alone causes the patient is not taken to the hospital or to the hospital will experience delays. Type of health assistance is categorized by contacting EMS (45.4%), contacting local doctor (26.6%), visiting local doctor and directly to hospital only (1.4%) (Faiz *et al.*, 2013).

## CONCLUSION

There was a significant relationship between decision-making and the search for health assistance with the duration of arrival of stroke patients coming to the emergency Department, rapid decision making will have an impact on the search for timely health assistance so that the delay in stroke patients coming to the emergency Department, is affected speed of decision-making and precisely seek health assistance.

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