

Conference Paper

Feasibility of the Study on the Development of the Stroke Center in Mohammad Hoesin Hospital Palembang in 2017

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Abstract

Stroke is a disease that causes the most death and disability in adults. Early diagnosis and prompt and appropriate treatment provides excellent results. Besides that, the treatment of stroke patients in the stroke unit's special room can also provide more significant results than treating them in an ordinary treatment room. This study discusses the factors involved in the development of the stroke center at Mohammad Hoesin Hospital. It is a qualitative research with a descriptive analytic design. Excavation information is carried out by document search, Focus Group Discussion (FGD) and Consensus Decision-making Group (CDMG). FGD implementation has involved all parties/units related to this stroke center program. As for CDMG, it is carried out with all levels of directors and medical committees to decide what decisions must be made so that the stroke center program can be run. The results of the study found several factors that became obstacles in the implementation of the stroke center program, among others, infrastructure, human resources, and policies on stroke service standards. The results of the study suggest making short-, medium- and long-term plans for the establishment of a stroke center at Mohammad Hoesin Hospital that would include infrastructure, human resources, and policies/standards needed for the stroke center to run optimally.

Keywords: central stroke, CDMG

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Received: 17 October 2018

Accepted: 5 November 2018

Published: 5 December 2018

Publishing services provided by
Knowledge E

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Selection and Peer-review under the responsibility of the 2nd ICHA Conference Committee.

1. Introduction

Stroke is a collection of symptoms carried out by various risk factors. Based on epidemiological data from the World Health Organization (WHO), strokes attacks 15 million people each year and 6 million suffer death [1]. According to data in Indonesia, stroke is the most common disease among other neurological disorders. Based on Riskesdas data in 2013, stroke prevalence rates in Indonesia are reported to be 12.1 per 1000 peoples. This number has increased from 8.3 per 1000 peoples as previous prevalence reported in the Riskesdas year 2007 [2]. The rate of disability due to stroke is also

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very high because patients who come to the Mohammad Hoesin Hospital (RSMH) have passed the acute phase of sequela due to a severe stroke and require long-term physiotherapy. Besides that, the death rate of stroke patients treated at Mohammad Hoesin Hospital (RSMH) was reported to be still quite high [3].

The stroke center is a comprehensive services program with multi-disciplinary involvement for stroke patients. It emphasizes the coordination of the network services of the surrounding hospitals, while the stroke unit is one of the requirements that must be in the center stroke program [4-6].

Support and commitment of the board of directors in realizing a stroke center as one of the superior services in RSMH is not so strong enough. This can be seen from the cancellation of the purchase of Transcranial Doppler in 2016 because the budget was diverted to buy heart instruments. Based on the aforementioned considerations, the researchers tried to find out how far is RSMH's readiness to establish a stroke center.

2. Methods

This research is an observational qualitative research conducted by document search, infrastructure observation and Focus Group Discussion (FGD) on the readiness of the formation of a stroke center. Furthermore, the Consensus Decision-making Group (CDMG) was conducted with the head of the hospital for decision-making regarding things that are considered not ready in preparation for the establishment of a stroke center.

The informants in this study were all parties in the hospital who were associated with the service of the stroke center. They consist of leaders of the RSMH (president director, medical service director, finance director, human resources director and chair of the medical committee), involved specialist doctors, and stroke nurses.

Secondary data are obtained from stroke center policy documents, documents related to human resources and policies regarding standard operating procedures for stroke centers while the primary data comes from observations of existing facilities and Focus Group Discussion (FGD). FGD participants consisted of specialist doctors and nurses involved in providing services for stroke patients. There were 7-8 people in each group. Besides that, CDMG was conducted with the board of directors and chair of the medical committee with results were primary data to produce decisions or agreements to build readiness for the establishment of a stroke center.

After data collection, analysis of data obtained from observation, document search, FGD and CDMG that is adjusted to existing stroke unit service standards.

3. Results

The results from literature studies, observation data and FGD matrices were processed and analyzed to find out the interrelationships between the variables, so that the readiness of the formation of a stroke center can be seen clearly, which is related to what factors are considered not ready and what factors are considered ready in efforts to build a stroke center program in Mohammad Hoesin Hospital.

3.1. Policy

In policy variables, data collection is done by searching documents and CDMG. Document searches are carried out in the medical services and neurology departments. The results of data analysis from document search are described in Table 1.

TABLE 1: Document search list.

No.	Documents	Available/Non-available	Information
1	Decree of the Minister of Health regarding national referrals	Available	
2	Strategic plan for the flagship hospital program	Available	
3	Clinical pathway for stroke	Available	
4	Standards for examination, monitoring, and therapy for stroke patients	Some available	NIHSS examination standards, thrombolytic therapy (existing ones)
5	The number of human resources in all relevant departments	Some are sufficient	The lack of speech therapists, occupational therapists, proficient nurses and neuro interventionists

Based on CDMG implementation involving the board of directors, the recommendations obtained were the making of academic texts on the construction of stroke centers. Still, from the results of CMDG implementation, the next recommendation was the formulation of Standard Operational Procedures (SOP) or protocols related to services and technical service arrangements for the stroke center itself [5, 6].

3.2. Infrastructure

Variable infrastructure data is obtained through observation and also CDMG. From the observation, it was concluded that most of the infrastructure in Mohammad Hoesin

Hospital is considered ready for the construction of a stroke center. For more details, data can be seen in Table 2.

TABLE 2: Results of infrastructure observation.

No.	Tools	Amount	Condition	Information
1	CT scan for the head	2	In good condition	-
2	Transcranial Doppler	1	In good condition	The printer has been damaged
3	Disseminated Substraction Angiography (DSA)	3	2 in good condition 1 in damaged and irreparable condition	-
4	Laboratory	1	in good enough condition	Can't check the protein c and s
5	Ambulance	4	In good condition	There is no ambulance specifically for stroke patients
6	Special room for stroke center	-	-	Planned in the BHC building
7	Monitor at NHCU	6	In good condition	-
8	patient beds at NHCU	10	In good condition	-
9	Neuro intervention tool	-	-	Not Available

3.3. Human resources (HR)

Based on the results of the document search and FGD conducted in 3 different groups, it was found that most of the human resources are considered sufficient. Even so, the field of rehabilitation has a shortage of speech therapy personnel and occupational therapy, as well as nurses who are proficient at strokes that are also lacking. Neuro-interventionist personnel is also not available, so it is planned to send one of the neurology department staff to take part in interventionist fellowship.

3.4. Organizational culture

From the FGD results, it was found that most of the informants already knew and understood the purpose of establishing a stroke center, while some others did not. This indicates a lack of plan socialization to establish a stroke center. Nonetheless, all informants expressed their support for the establishment of a stroke center because they realized that the stroke center would improve the quality of services for stroke patients to provide maximum results. In addition, they support this program because it was included as one of the flagship hospital programs [5-7].

3.5. Source of funds

Regarding the issue of funding sources for the stroke center development program, CDMG produced information that the funds to be used for this stroke center program would be governed by the board of directors, especially the finance director. Funds to use can be sourced from APBN or from the hospital itself.

4. Discussion

Readiness for the stroke center development program is determined by factors including policy, human resources, funding sources, organizational culture, and infrastructure. Commitment to change is a psychological condition which is the willingness of members in the organization to make changes. While the effectiveness of change is the ability of the organization or members of the organization to make changes.

Readiness analysis for the stroke center development program was done by comparing the standard stroke center according to Canadian Stroke Best Practice with current hospital conditions. The standard of stroke unit that is used as a reference is Canadian Stroke Best Practice because researchers consider the requirements to be quite complete and in accordance with the Mohammad Hoesin Hospital as a type A hospital and tertiary referral [5-8].

From the document search, it was found that the policy factor was sufficient. Likewise, the infrastructure is quite complete. However, there is no special unit for the treatment of stroke patients. From the Focus Group Discussion (FGD), it was found that Mohammad Hoesin Hospital shows good results in organizational culture factors. This is because all related elements in this hospital had to learn organizational culture to always change to be better. The factor of human resources in this hospital is partly available. This hospital only needs to increase the number and do the improvement of special competencies through training or fellowship. Based on the CDMG conducted with the board of directors, there is a very strong commitment to implement the stroke center development program and funding will be carefully prepared.

5. Conclusion

Factors that influence the stroke center development program in Mohammad Hoesin Hospital are policy factors, organizational culture, human resources, infrastructure, and funding sources. From all of these factors, the one that is considered to be ready to

support the program is policy factor, organizational culture, funding sources. While the factors that are still lacking are infrastructure factors and human resource factors.

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