



OVERVIEW OF STROKE INCIDENCE IN THE WORK AREA OF PUSKESMAS KAWAL

By

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ABSTRACT

Stroke is a disease that attacks a person suddenly and it is one of the leading causes of death and neurological disability in Indonesia except heart disease and cancer. Various conditions related to the increase in the incidence of stroke. The purpose of this study is to determine the picture of stroke incidence in the work area of the Kawal Health Center in 2019. The source of data from this study is a secondary data source, namely patient medical records at the Kawal Health Center from October 2018 to April 2019. The data source is then processed and made a frequency distribution. The results showed that the incidence of stroke in 2019 was 9 events. Other supporting conditions are the discovery of stroke risk factors, including Hypertension as many as 41 people (77%), Diabetes Mellitus 12 people (23%) for 2018. Meanwhile, in 2019, data on hypertension risk factors were obtained by 196 people (85%) and risk factors for Diabetes Mellitus 34 people (15%). It is hoped that the puskesmas can provide counseling to the community about the emergency of stroke

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1. INTRODUCTION

Stroke (*Cerebrovascular Accident / CVA*) is a disease that to attack a person very suddenly and it is one of the main causes of death and neurological disability in Indonesia except heart disease and cancer. The estimated prevalence of stroke is about 47/10,000 of the population, which is usually disabled. The results showed that stroke was experienced by patients with cognitive impairment (33%), limb disorders (30%) and speech disorders 27% [1].

According to medical experts, the high incidence of stroke in Indonesia is more due to the unhealthy lifestyle and lifestyle of the people. For example, consuming too much fatty right and high cholesterol, *fast food*, smoking habits, and lack of movement or exercise. Indeed, these habits do not necessarily or directly lead to stroke, but increase the risk of hypertension which is a trigger for stroke, heart disease, and cognitive impairment (vascular cognitive impairment, such as decreased attention, language ability, memory strength, visuo-spatial and executive function). Currently, stroke is triggered by hypertension which is often referred to as the *silent killer*, in addition to diabetes mellitus, obesity and various health disorders associated with degenerative diseases [2].

Conditions that cause or worsen a stroke are referred to as risk factors. Everyone should be careful if they have ever experienced: high blood pressure (high blood pressure); heart disease; diabetes mellitus; hyperlipidemia (increased levels of fats in the blood); coronary artery disease; and had a mild stroke). There are also other risk factors, including: high blood fat levels; overweight or obese; Smoke; lack of exercise; Uric acid levels are high and fibrinogen levels are high. These factors are very small factors. However, such factors should not be underestimated this risk because their presence still offers the chance of having a stroke. Such a risk factor should be alerted. The things

mentioned above are risk factors that can still be controlled. There are other risk factors that cannot be controlled. These risk factors are age, gender and lineage.

The number of events related to risk factors causes the incidence of stroke to increase at any time. Based on the background that has been described, it underlies researchers to find out how the picture of stroke events in the work area of the 2019 Kawal Health Center.

2. RESEARCH METHOD

The design in this study is a descriptive survey which is carried out on a set of objects that usually aim to see a picture of phenomena (including health) that occur within a certain population [3]. This type of research is quantitative and the research design used is descriptive observational with retrospective data collection. The purpose of the descriptive observational study was to see a picture of the incidence of stroke in the working area of the Kawal health center, Bintan Regency, Riau Islands. This type of data is secondary data in the form of medical records of patients with stroke cases and stroke risk factors (DM and Hipetensi) of the Kawal Health Center, Bintan Regency, Riau Islands from October 2018 to April 2019.

3. RESULTS AND DISCUSSION

1. Research Result

In this section, researchers will present the results of research on the picture of stroke events at the Kawal Health Center in 2019. This research has been carried out for one week from September 17 to November 28, 2019.

2. General Data

The characteristics of the respondents discussed include age, gender and causes and population at the Kawal Health Center, Bintan Regency.

3. Custom Data

Table 1. Distribution of respondents based on DM and Hypertension risk factors in 2018

No	Education Level	Respondents	
		Sum	Percentage (%)
1	DM	12	23
2	Hypertension	41	77
Sum		53	100

Based on table 1, it shows that the frequency distribution of respondents based on risk factors for DM 15 people (23%) and Hypertension is 41 people (77%).

Table 2 Distribution of respondents by sex of 2019 DM risk factors

No	Education level	Respondents	
		Sum	Percentage (%)
1	Man	9	26
2	Woman	25	74
Sum		34	100

Based on table 2, it shows that women dominate as having a risk factor for Diabetes Mellitus.

Table 3. Distribution of respondents by sex of 2019 Hypertension risk factors

No	Education level	Respondents	
		Sum	Percentage (%)
1	Man	64	33
2	Woman	132	67
Sum		196	100

Based on table 3., it shows that women dominate as having a risk factor for hypertension



Table 4 Distribution of respondents by 2019 Stroke Incidence

No	Kind	Respondents	
		Sum	Percentage (%)
1	Suspect SNH	7	78
2	SNH	1	11
3	Post Stroke	1	11
Sum		9	100

Based on table 3.4, it shows that the majority of SNH suspect stroke events are 78% of all stroke events during 2019.

Table 5 Distribution of respondents by 2019's 10 biggest cutters

No	Disease	Responden	
		Sum	Percentage (%)
1	Hypertension	1032	32,05
2	Commond Cold	456	14,16
3	Dyspepsia	356	11,06
4	Ispa	300	9,32
5	Cephalgia	240	7,45
6	Myalgia	232	7,20
7	Diabetes Mellitus Type 2	176	5,47
8	Acute Gastroenteritis	164	5,09
9	Pharyngitis	148	4,60
10	Febris	116	3,60
Sum		3.220	100

Based on table 3.5, it shows that the risk factors for stroke are Hypertension with an incidence of 1032 (32.05) and Diabetes Mellitus with a total of 176 cases (5.47%).

4. Discussion

Based on data from the Kawal Health Center in October 2018 - April 2019, 9 incidences of stroke disease were obtained. Data in 2018 showed that the distribution of respondents based on risk factors was DM 15 people (23%) and Hypertension was 41 people (77%). Data in 2019 showed that the frequency distribution of respondents based on risk factors of DM 34 people and Hypertension was 196 people. Data shows that the most DM respondents are women as many as 25 people (74%). Then the most hypertension respondents were female as many as 132 people (67%).

This is corroborated by data from the 10 largest diseases from the Kawal Health Center that Hypertension ranks first with an incidence rate of 1,032 cases (32.05%) and followed by DM disease which ranks seventh with an incidence rate of 176 cases (5.47%).

Hypertension is a risk factor that often causes stroke. About 50-70% of stroke cases are caused by hypertension [1,4]. Patients with a history of hypertension affect arterial damage, thickening, arterosclerosis or arteries may rupture or rupture. This is evidenced from data from puskesmas Kawal in 2018 showing that the risk factor for hypertension is around (77%). Meanwhile, data from the Kawal Health Center in 2019 showed that the risk factor for hypertension was still the highest with the incidence of 196 people (85%).

In DM disease, there is a vascular disorder or damage to both large and small blood vessels due to hyperglycemia so that blood flow becomes slow, inhibition of blood flow to the brain so that it is at risk of stroke [1]. Based on 2018 data, it shows that respondents have a DM risk factor of 12 people (23%). In 2019, it showed that respondents had an increase in DM risk factors by 34 people (15%). If this risk factor is left alone, it will result in disorders in the blood circulation in the brain due to rupture of blood vessels or blockage of blood vessels in the brain so that it affects the functioning of the nervous system.

4. CONCLUSION

Data from puskesmas Kawal in 2019 shows that the incidence of stroke is 9 with the distribution of events based on the type of stroke, namely 7 SNH suspects (78%). Based on 2018 data, hypertension risk factors were 41 people (77%). Data in 2019 showed that the risk factors for hypertension increased by 196 people (85%). Then the risk

factor with DM disease for 2018 was 12 people (23%). Meanwhile, the risk factor for DM in 2019 was 34 people (15%).

5. ACKNOWLEDGEMENTS

1. It is hoped that there will be identification of public knowledge about stroke
2. It is expected to improve health promotion about stroke through print or electronic media and be carried out thoroughly at the level of society.
3. Involving all elements of the community, health practitioners or academics as an effort to prevent stroke in Bintan Regency.

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