
PATTERN OF ANTIHYPERTENSION DRUG ADMINISTRATION IN HYPERTENSION PATIENTS IN OUTPATIENT TUAN RONDA HOSPITAL PEMATANG RAYA, SIMALUNGUN DISTRICT

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Abstract

Until now, hypertension is still a big challenge in Indonesia. In accordance with the 2013 Riskesdas data, the prevalence of hypertension is quite high, namely 25,896. This study aims to determine the pattern of administration of antihypertensive drugs to hypertensive patients at Tuan Rondahaim Hospital, Pematang Raya, Simalungun Regency. This research was conducted using a descriptive research design and data collected retrospectively. The material used is data from hypertension patient prescriptions at Tuan Rondahaim Hospital, Pematang Raya, Simalungun Regency. The number of samples used was obtained as many as 231 patients. The results obtained were that hypertension patients based on sex characteristics were mostly women 54.1196, the most age was 61 — 80 years 65.806. On the profile of antihypertensive drug use by patients, There are 5 classes of antihypertensives used. The most widely used anti-pertensive class Blocker (CCB) was the Calcium Channel amlodipine group of 61.03%, which was used by 141 patients, then the diuretic class of furosemide type was 41.9% used by 97 patients.

Keywords: Antihypertensives, Patterns of Use

INTRODUCTION

Until now, hypertension is still a big challenge in Indonesia. Hypertension is a condition that is often found in primary health care and is a health problem with a high prevalence, which is 25,899, according to Riskesdas 2013 data. In addition, hypertension control is not yet strong even though effective drugs are widely available (Anonymous, 2014) . As a place of primary health care, of course the hospital has an important role in the treatment of hypertension patients. Currently hypertension is the third largest risk factor that causes premature death, hypertension results in congestive heart failure and cerebrovascular disease. The symptoms include dizziness, headache, sudden bleeding from the nose, sore neck, and others. This disease is influenced by the way and habits of a person's life, often referred to as the silent killer disease because sufferers do not know that they have hypertension. Patients come for treatment after organ abnormalities arise due to hypertension. Hypertension is also known as a heterogeneous group of disease because it can affect anyone from various age, social and economic groups. The trend of changing lifestyles due to urbanization, modernization and globalization raises a number of risk factors. Hypertension is also known as a heterogeneous group of disease because it can affect anyone from various age, social and economic groups. The trend of changing lifestyles due to urbanization, modernization and globalization raises a number of risk factors. Hypertension is also known as a heterogeneous group of disease because it can affect anyone from various age, social and economic groups. The trend of changing lifestyles due to urbanization, modernization and globalization raises a number of risk factors.

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As a primary health service, hospitals have an important role in the management of various kinds of diseases, both communicable and non-communicable. Hypertension as a non-communicable disease, of course, is also one of the diseases that many people encounter in primary health services such as hospitals. With an increase in the community's economy and in line with the development of food both in rural and urban areas, cases of hypertension will also increase. Residents who live in urban areas in particular will prefer health facilities that are closer to where they live so that hospitals will be the first choice for residents to treat their illnesses, including hypertension. Therefore the authors chose the hospital as the object of research.

Formulation of the problem

Based on this background, the authors formulate the problems in the research, namely:

1. What is the pattern of giving antihypertensive drugs to outpatients with hypertension at Tuan Rondahaim Hospital, Pematang Raya, Simalungun Regency. ,
2. What are the characteristics of outpatient hypertension patients at Tuan Rondahaim Hospital Pematang Raya, Simalungun Regency.
3. What types of antihypertensive drugs are used by outpatients at Tuan Rondahaim Hospital, Pematang Raya, Simalungun Regency?

LITERATURE REVIEWS

Antihypertensive

Anti-hypertension are drugs that are used to treat hypertensionhypertension. Anti-hypertensives are also given to individuals who have a high risk of developing cardiovascular disease and those who are at risk of stroke or myocardial infarction. Medication does not mean keeping individuals away from healthy lifestyle modifications such as losing weight, reducing salt and alcohol consumption, stopping smoking, reducing stress and exercising. Drug administration needs to be done immediately in patients with systolic blood pressure > 140/90 mmHg. Patients with stroke or myocardial infarction or evidence of severe organ damage (such as micro albuminuria, left ventricular hypertrophy) also require immediate treatment with anti-hypertensives.

Usage Pattern

In the direct use pattern, goods consumed can provide direct benefits as a means of fulfilling needs, for example food and beverages. In the indirect use pattern, goods consumed or purchased indirectly provide benefits.

METHODS

Research Place

This research was conducted on outpatients at the Pematang Raya Hospital, Simalungun Regency.

Research time

This research was conducted in February - April 2018

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Research design

Data were collected retrospectively in February-April 2018 through secondary data collection, namely from medical records and hypertension prescriptions at Tuan Rondahaim Hospital Pematang Raya, Simalungun Regency.

Data collection technique

Data on patient characteristics and drugs used by patients were taken from secondary data originating from outpatient prescriptions at Tuan Rondahaim Hospital, Pematang Raya, Simalugun Regency.

Data analysis

Data analysis was carried out in stages which included univariate, bivariate,

1. Univariate analysis

Univariate analysis was performed to get an overview of each dependent variable and independent variable. The data will be presented in the form of a frequency distribution.

2. Bivaria analysis

Bivariate analysis is to determine whether there is a relationship between the independent variables (categorical) and the independent variables (categorical) by using the Kai Square Test or Chi Square.

To determine the significance of the results of statistical calculations, a significance limit of 0.05 was used. Thus if the p value < 0.05 then the calculation results are statistically significant and if p - 0.05 then the results of the statistical calculations are not significant.

RESULTS AND DISCUSSION

Classification of hypertension patients based on gender is used to determine whether gender is a factor that influences the occurrence of hypertension in a person. Bagget (2004) states that blood pressure increases with age, but in general women have higher blood pressure than men of the same age. The results of this study also show that there are more female hypertensive patients than men, as shown in the figure. It can be seen from Figure 4 that 125 people (54.1190) suffer from hypertension, the average gender is female. This is in accordance with the literature, namely the incidence of hypertension which is greater in women than men can be caused by psychological factors. The percentage of incidence of hypertension in men is 45, 8900 (106 people). Bower (1995) states that depression suffers more from women than men. According to Kaplan (2001), depression or stress can be considered as a factor causing hypertension because stress can cause hyperactivity of the sympathetic nervous system. This can cause an increase in blood pressure due to increased catecholamine secretion. Catecholamines consist of adrenaline and noradrenaline which are produced by the adrenal glands as a result of the work of the sympathetic nervous system. Adrenaline and non-adrenaline produce an effect, namely an increase in heart contractions so that cardiac output increases and causes an increase in blood pressure. In addition, according to Dipro (2005), more women suffer from cardiovascular disease after

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menopause, this is related to the hormone progesterin which is a component of oral contraceptives.

Based on age characteristics, there were 19 people (8.2%) aged 26-40 years, 53 people (22.9%) 41-60 years, 152 people (65.8%) 61-80 years, and 81-99 years as many as 7 people (3.03%). The age that is most susceptible to hypertension is at the age of 61-80 years which is influenced by the hormone estrogen, when experiencing menopause the hormone estrogen will also decrease, this has implications for an increase in blood pressure. As shown by figure 5.

The pattern of antihypertensive treatment is seen through several parameters including class and type of drug used. The diuretic group consisted of 65.7% furosemide and spironolactone, 12.5% of the ACE Inhibitor class of captopril, 62.7% of the Calcium Channel Blocker (CCB) group of nifedipine and amlodipine, the irbesartan type of Angiotensin II Receptor Blocker (ARB). as much as 15.1%, the Beta Blocker type of propranolol and bisoprolol as much as 8.2%. In this group, the drug most often used is the CCB type amlodipine because its way of working inhibits the entry of calcium needed for muscle contraction into the heart muscle and blood vessel walls, so that the heart rate will slow down and the blood vessels will widen. This will result in lowering blood pressure and relieve chest pain. And the drugs that are rarely used are the Beta Blocker class of bisoprolol and propranolol types.

Until now, hypertension is still a big challenge in Indonesia. In accordance with the 2013 Riskesdas data, the prevalence of hypertension is quite high, namely 25,896. This study aims to determine the pattern of administration of antihypertensive drugs to hypertensive patients at Tuan Rondahaim Hospital, Pematang Raya, Simalungun Regency. This research was conducted using a descriptive research design and data collected retrospectively. The material used is data from hypertension patient prescriptions at Tuan Rondahaim Hospital, Pematang Raya, Simalungun Regency. The number of samples used was obtained as many as 231 patients. The results obtained were that hypertension patients based on sex characteristics were mostly women 54.1196, the most age was 61 — 80 years 65.806. On the profile of antihypertensive drug use by patients, There are 5 classes of antihypertensives used. The most widely used anti-pertensive class Blocker (CCB) was the Calcium Channel amlodipine group of 61.03%, which was used by 141 patients, then the diuretic class of furosemide type was 41.9% used by 97 patients.

CLOSING

Conclusion

Based on the results of the study on the pattern of administration of antihypertensive drugs in outpatient polyhypertensive patients at Tuan Rondahaim Hospital Pematang Raya, Simalungun Regency, it can be concluded as follows.

1. Characteristics of patients based on sex most were women as much as 54.11% at the age of 61-80 years (65.80%)
2. In the profile of the use of antihypertensive drugs by patients, there are 5 classes of antihypertensives used. The most used antihypertensive groups are:
3. Amlodipine type Calcium Channel Blocker (CCB) group of 61.03%, used by 141 patients,
4. Furosemide type diuretic class 41.99% was used by 97 patients

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5. 23.80% Spironolactone type diuretic used by patients ACE class Inhibitor Captopril type 12.55% used by 29 patients
6. the Angiotensin Receptor Blocker (ARB) class of Irbesartan type 15.15% was used by 35 patients, the Beta Blocker class of Bisoprolol type 6.49% was used by 15 patients, then
7. the Beta Blocker class of Propranolol type 1.73% was used by 4 patients as well
8. Calcium Channel Blocker (CCB) class of Nifedipine type 1.7306 is used by the patient.

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