

UTILIZATION OF GENERIC ANTIHYPERTENSIVE MEDICATIONS BASED ON SALES DATA AT K-24 BUARAN PHARMACY

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ABSTRAK

Survei Kesehatan Indonesia tahun 2023 menunjukkan prevalensi hipertensi pada usia > 18 tahun berdasarkan diagnosis dokter adalah 13,22%, meningkat menjadi 55,23% pada usia 55-64 tahun. Berdasarkan jenis kelamin, prevalensi hipertensi lebih tinggi pada perempuan (36,85%) dibandingkan laki-laki (31,34%), mengindikasikan risiko yang lebih besar pada perempuan. Tujuan dari penelitian ini adalah untuk mengetahui tingkat penggunaan obat antihipertensi yang dijual di apotek berdasarkan data penjualan. Penelitian ini menggunakan metode deskriptif kuantitatif untuk menggambarkan penggunaan obat generik antihipertensi. Penelitian dilakukan di Apotek K-24 Buaran dari bulan Mei hingga Juni 2025. Populasi penelitian ini adalah seluruh data penjualan obat generik antihipertensi di Apotek K-24 Buaran pada bulan Mei – Juni 2025. Sampel penelitian diambil menggunakan metode Total Sampling, mencakup seluruh data penjualan obat generik antihipertensi baik berdasarkan resep maupun non-resep selama periode tersebut. Hasil penelitian menunjukkan bahwa Amlodipine Besilate merupakan obat antihipertensi yang paling banyak digunakan di apotek. Kesimpulan dari penelitian ini adalah bahwa dalam persepsian obat generik antihipertensi, jenis-jenis obat yang ditemukan meliputi Amlodipine, Candesartan, Nifedipine, Captopril, dan Bisoprolol.

Kata Kunci: hipertensi, obat generik, penggunaan, penjualan

ABSTRACT

The 2023 Indonesian Health Survey indicates that the prevalence of hypertension in individuals aged over 18 years, based on a doctor's diagnosis, is 13.22%, increasing to 55.23% in the 55-64 age group. Based on gender, the prevalence of hypertension is higher in women (36.85%) compared to men (31.34%), suggesting a greater risk for women. The purpose of this study was to determine the extent of antihypertensive drug use sold in pharmacies based on sales data. This study utilized a quantitative descriptive method to illustrate the use of generic antihypertensive drugs. The research was conducted at Apotek K-24 Buaran from

May to June 2025. The population of this study was all sales data of generic antihypertensive drugs at Apotek K-24 Buaran during May – June 2025. The research sample was taken using the Total Sampling method, encompassing all sales data of generic antihypertensive drugs, both prescription and non-prescription, during that period. The results show that Amlodipine Besilate is the most frequently used antihypertensive drug in the pharmacy. The conclusion of this study is that in the prescription of generic antihypertensive drugs, the types of drugs found include Amlodipine, Candesartan, Nifedipine, Captopril, and Bisoprolol.

Keywords: *hypertension, generic drugs, use, sales*

INTRODUCTION

Hypertension or high blood pressure is a chronic condition characterized by an increase in systolic and diastolic blood pressure above 140/90 mmHg. This condition causes the heart to work harder to circulate blood throughout the body from blood vessels. Hypertension is often triggered by the consumption of high-sodium foods, as sodium retention in the blood is one of the causes of hypertension. This condition can disrupt blood flow, damage blood vessels, and even lead to death. Hypertension can be prevented either before or after diagnosis by recognizing and avoiding risk factors and undergoing regular health check-ups. (1)

According to the 2018 Basic Health Research (Riskesdas), the prevalence of hypertension in Indonesia reached 34.1%, an increase from 25.8% in 2013. In the Special Capital Region of Jakarta (DKI Jakarta), the prevalence of hypertension based on measurements in individuals aged >18 years was relatively high, at 33.43%. The 2023 Indonesian Health Survey reported that the prevalence of hypertension in individuals aged >18 years, based on physician diagnosis and measurement, was 13.22%, while in the 55–64 age group, it reached 55.23%. Measurements based on gender showed that women had a higher prevalence (36.85%) than men (31.34%), indicating a greater risk of hypertension among women. (2)

Hypertension can be prevented by controlling risk behaviors such as smoking, unhealthy diets (insufficient intake of fruits and vegetables and excessive salt consumption), obesity, lack of physical activity, alcohol consumption, and

stress. Successfully controlling blood pressure has been shown to reduce the incidence of stroke by 30–40% and coronary heart disease by 20%. (3)

According to the Regulation of the Minister of Health of the Republic of Indonesia No. 73 of 2016, pharmaceutical services are direct and responsible services to patients related to pharmaceutical preparations to achieve definite outcomes in improving quality of life. Drugs are raw materials or combinations of substances, including biological products, used to affect or investigate physiological systems or pathological conditions for the purpose of diagnosis, prevention, treatment, recovery, health improvement, and contraception in humans. However, the use of generic drugs in Indonesia only accounts for about 7% of the market share. The purpose of this study is to provide an overview of the use of antihypertensive drugs based on sales data at K-24 Buaran Pharmacy during May–June 2025.

RESEARCH METHOD

This research is a non-experimental study using a quantitative descriptive method.

RESEARCH LOCATION AND PERIOD

1. Research Location

This study was conducted at K-24 Buaran Pharmacy.

2. Research Period

The research was carried out from December 2024 to June 2025.

RESEARCH PROCEDURE

1. Collecting Sales Data

The researchers collected sales data of generic antihypertensive drugs during May–June 2025 from the K-24 sales reporting system known as "OK-Soft". The data was then processed based on prescription and non-prescription categories.

2. Data Processing and Presentation

Once the sales data was obtained, it was processed using Microsoft Excel and presented in the form of percentage tables. The data presentation used the following formula:

$$\text{Percentage Formula} = \frac{\text{Prescription data} - \text{Non-Prescription Drug Data in 1 Month}}{\text{Total Data}} \times 100\%$$

POPULATION AND SAMPLE

1. Population

The population in this study consisted of sales data of generic antihypertensive drugs at K-24 Buaran Pharmacy for the period of May–June 2025.

2. Sample

The sample used in this study was determined by the Total Sampling method, which includes all sales data of generic antihypertensive drugs, both prescription and non-prescription, at K-24 Buaran Pharmacy during May–June 2025.

RESEARCH INSTRUMENT

The data collection method used in this study was primary data collection, obtained directly from the sales of generic antihypertensive drugs at K-24 Buaran Pharmacy.

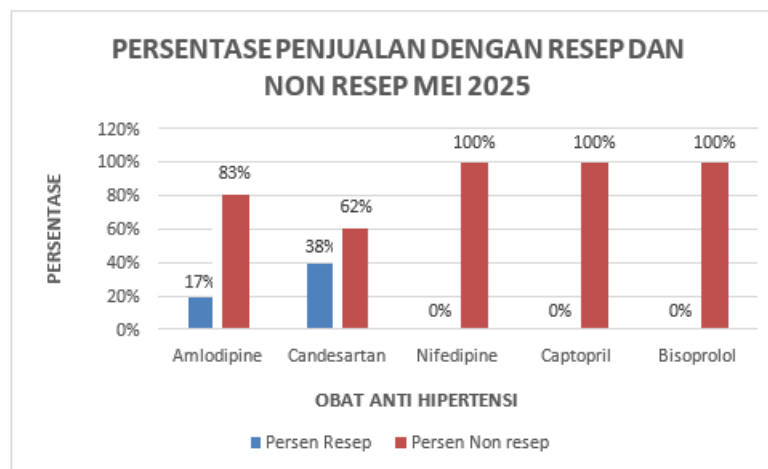
DATA ANALYSIS DESIGN

The collected sales data of generic antihypertensive drugs were processed using Microsoft Excel and presented in the form of tables and charts.

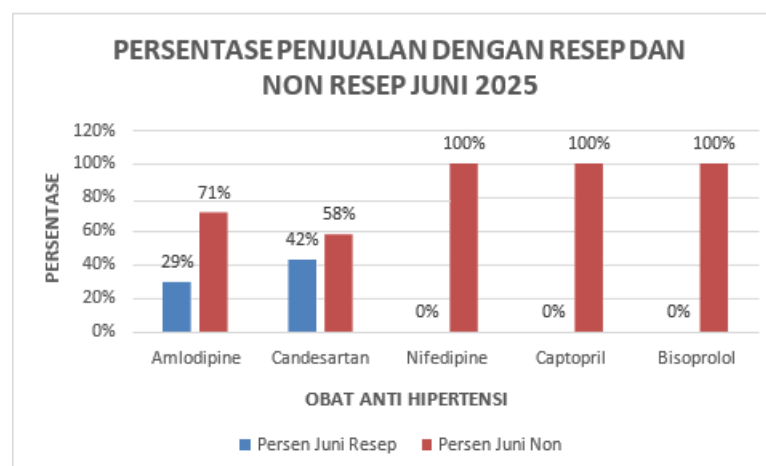
RESULTS AND DISCUSSION

This research was conducted at K-24 Buaran Pharmacy during May–June 2025. Samples were taken from sales data of generic antihypertensive drugs, which were then used to determine usage patterns. Sales data were collected based on: Prescriptions brought by customers from other healthcare facilities (such as hospitals, clinics, or private practice physicians), and Non-prescriptions, where customers purchased antihypertensive drugs directly from the pharmacy without a

prescription. The collection and processing of data were categorized into prescription and non-prescription groups. Eligible samples were gathered and classified based on the presence of antihypertensive drugs, the quantity of drug purchases, and the cost. The samples were processed using Microsoft Excel 2023 and presented in tabular form.

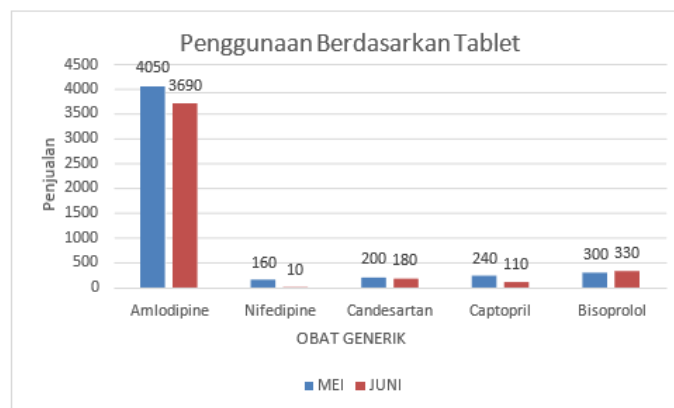


Percentage Chart of Antihypertensive Drug Prescriptions in May



Percentage Chart of Antihypertensive Drug Prescriptions in June

Based on the percentage data above, it can be seen that the sale of drugs especially prescription-only medications was largely done without prescriptions. The data shows a significant comparison: in May, the purchase of Amlodipine with a prescription accounted for only 17%, or 33 prescriptions. Candesartan had 38%, or 8 prescriptions. Meanwhile, the remaining drugs Nifedipine, Captopril, and Bisoprolol had 100% non-prescription sales, meaning they were entirely sold without prescriptions. In June, a slight increase was observed, showing a small improvement: 29% of Amlodipine was sold with prescriptions, and 42% for Candesartan. However, the other three drugs still had 100% non-prescription sales, indicating no change in the past two months. This may be due to the fact that these drugs are rarely purchased by the public.

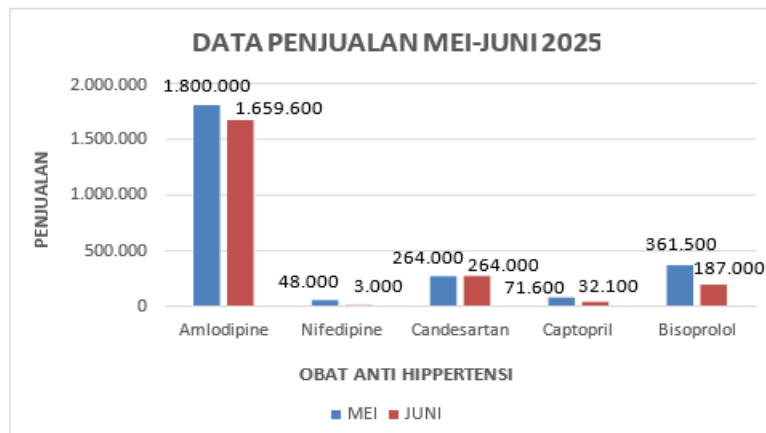


Monthly Sales of Generic Antihypertensive Tablets: May–June 2025

In the overview of generic drug usage during May–June 2025, the most sold generic antihypertensive drug at K-24 Pharmacy was Amlodipine, with a total of 7,740 tablets sold-4,050 tablets in May and 3,690 tablets in June. Nifedipine had total sales of 170 tablets, distributed as 160 tablets in May and 10 tablets in June. Candesartan recorded total sales of 380 tablets, with 200 tablets sold in May and 180 tablets in June. Captopril had total sales of 350 tablets, consisting of 240 tablets in May and 110 tablets in June.

Bisoprolol recorded total sales of 630 tablets, with 300 tablets sold in May and 320 tablets in June. The use of these antihypertensive drugs was predominantly based on prescriptions for patients aged over 40 years, indicating that age may be a

contributing factor to the development of hypertension.



Sales Data Chart of Antihypertensive Drugs

Based on the sales data from May to June 2025 at K-24 Pharmacy, the highest-selling generic antihypertensive drug in terms of revenue was Amlodipine Besylate, with a total income of IDR 3,459,000. This was followed by Nifedipine with IDR 51,000, Candesartan with IDR 528,000, Captopril with IDR 103,700, and Bisoprolol with IDR 548,000. According to these figures, Amlodipine ranked first in sales, followed by Bisoprolol in second, Candesartan third, Captopril fourth, and Nifedipine fifth. Considering the relatively low and affordable prices of these generic drugs, which range from IDR 300 to IDR 600 per tablet at K-24 Pharmacy, the public can easily purchase them to manage hypertension at a reasonable cost. This affordability supports the main objective of providing generic medicines—to ensure accessibility for all segments of the population.

CONCLUSION

Based on the collection of prescription and non-prescription sales data of generic antihypertensive drugs, the following conclusions can be drawn:

1. The prescribed generic antihypertensive drugs included: Amlodipine, Candesartan, Nifedipine, Captopril, and Bisoprolol.
2. The percentage of Amlodipine prescribed was 17% in May and 83% in June. The percentage of Nifedipine usage without a prescription was 100% in both May and June. The percentage of Candesartan prescribed was 38% in May and 62% in June. The percentage of Captopril used without a prescription was 100%

in both months, and the same applies to Bisoprolol, with 100% non-prescription use in both May and June.

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