



Profile of Storage System of LASA Drug Services in a Pharmacy, Besuki District, Situbondo Regency

Abdul Hakim*, Novia Maulina, Ach. Syahrir, Qoyyimatul Bayyinah

Department of Pharmacy, Faculty of Health and Medicine, Maulana Malik Ibrahim State Islamic University of Malang, Malang, Indonesia

Email: ahakim@farmasi.uin-malang.ac.id

Abstract

The development of drug production is relatively rapid, causing several drugs that have almost the same shape, name, and packaging. This can cause medication errors in the form of errors in administering drugs to patients. Drugs that are nearly the same shape and name are known as LASA (Look Alike Sound Alike) drugs. This study aimed to determine the profile of the LASA drug storage and service system at pharmacies in Besuki District, Situbondo Regency. This research includes qualitative research through in-depth interviews and direct observation. The sample used in this study is a saturated sample. The results showed that the LASA drug storage system in pharmacies throughout Besuki District, Situbondo Regency only implemented a system of giving the distance between drugs one and other drugs, while other provisions for storing Lasas were not carried out. The LASA drug service system is carried out by conducting double checks, memorizing various LASA drugs, and contacting doctors to clarify prescriptions for LASA drugs. Based on these results, it can be concluded that pharmacies in Besuki District, Situbondo Regency, do not meet the criteria in the LASA drug storage system. Meanwhile, in the LASA drug service system, pharmacies throughout Besuki District, Situbondo Regency have met the requirements for LASA drug services.

Keywords: *LASA drug, Service, Storage*

Introduction

Drugs have many uses, not only can give patients healing, but drugs can also harm themselves if the management is not carried out by existing regulations. Medication errors still occur even though there are various rules (Putra, 2016). One of the factors that cause medication errors is an error in the medication administration process (dispensing error). According to previous research, dispensing errors that occur are often caused by drugs with almost the same packaging and name (LASA) (Muhlis, 2019). LASA drugs and their storage system are one of the factors in the occurrence of dispensing errors (Aldhwaihi, 2016). In addition, errors in reading LASA prescriptions, unclear doctor's writing for LASA drugs, and adjacent LASA drug storage are also factors that cause dispensing errors (Tajudiin, 2012).

Various efforts that can be made by pharmacists to avoid drug-taking errors include

separating LASA drugs from other drugs, providing an installation of a warning system on the computer or the packaging, conducting double-checking of drugs, contacting doctors to clarify prescriptions, and memorizing various LASA drugs (Muhlis, 2019). Meanwhile, according to the Ministry of Health (2019), the storage of LASA/NORUM drugs is not close to each other and is given a special label so that officers can be more aware of the presence of LASA or NORUM drugs.

Therefore, researchers are interested in conducting a study on the "Profile of the LASA drug storage and service system (look alike sound alike) in pharmacies throughout Besuki District, Situbondo Regency," to find out the profile of the LASA drug storage and service system carried out by pharmacists and pharmaceutical technical personnel. This research was conducted in Besuki Subdistrict, Situbondo Regency because there has been no similar research conducted in subdistrict pharmacies.

Implementation Method

Types of research

This study uses qualitative research through in-depth interviews accompanied by direct observation (observation). Qualitative research is an investigation method to find answers to a question that is carried out systematically by using a set of procedures to answer questions, collect facts, and produce findings that can be used. This study refers to the LASA drug storage and service system in pharmacies throughout Besuki District, Situbondo Regency.

Population

The population surveyed in this study consisted of pharmacies in Besuki sub-district, Situbondo district, with a total of five pharmacies, based on survey results and information from sub-district officers.

Sample

The sample used is the entire population.

Place and time of research

This research was conducted at pharmacies throughout Besuki District, Situbondo Regency in 2021.

Research Instruments

In this study, researchers conducted direct interviews with pharmacists and pharmacy staff. Apart from that, researchers also made direct observations on LASA drug storage and service activities. The instruments used in this study include interview guidelines, observation sheets, stationery, cameras, and recording devices (mobile phones).

Results and Discussion

Overview of Research Sites

The number of pharmacies in Besuki District, Situbondo Regency, is 5. However, at the time of the study, 2 pharmacies refused to be sampled. The 3 pharmacies that are willing to be sampled consist of the BJ Pharmacy, the NB Pharmacy, and the AD Pharmacy.

Characteristics of Informants

The informants selected in this study were pharmacists and pharmaceutical technical personnel. However, at the time of the research, of three pharmacies in Besuki District, Situbondo Regency, which consisted of BJ Pharmacy, NB Pharmacy, and AD Pharmacy, all three did not have Pharmaceutical Technical Personnel. So the informants in this study consisted of three (3)

people who served as pharmacists. Pharmacists are part of health workers who have the authority and obligation to carry out pharmaceutical work as stated in PP No. 51 of 2009 concerning pharmaceutical work, article 1. Pharmaceutical workers are manufacturing, including quality control of pharmaceutical preparations, security, procurement, storage, and distribution or distribution of drugs; drug management; drug service on doctor's prescription, drug information service, drug development, medicinal ingredients, and traditional medicine.

The list of names of those who became informants in this study can be seen in the table below:

Table 1: Informant Names List

NO	Name	Age	Gender	Position
1.	YK	24 years old	Female	Pharmacist
2.	AKK	29 years old	Female	Pharmacist
3.	LH	46 years old	Female	Pharmacist

Lasa Drugs Quantity

Based on the interviews and observations from the three pharmacies located in Besuki District, Situbondo Regency, the various LASA drugs mentioned by the informant are included in the LASA class of similar speech, same packaging, and drug name same different strength. Rusli (2018) stated that LASA drugs are classified into three types: similar speech, similar packaging, and the same drug name with different strengths.

Table 2: List of LASA Drug Amounts and Types

Name of Pharmacy	LASA Drug Quantity	Types of LASA drugs		
		Similar Sayings	Similar Packaging	Same drug name, different strength.
BJ Pharmacy	8	- Histapan and Hepatasan - Pimtracol and Pritacort	- Ceftriaxon and Cefotaxim - Mycoral Salep and Kalmicetin Salep - Pibaksin and Centabio	- Amlodipin 5 mg and 10 mg - Mefinal 250 and 500 mg - Amoxan 250 and 500 mg
NB Pharmacy	14	-	-	- Allupurinol 100 mg and 300 mg - Amlodipin 5 mg and 10 mg - Binotal 500 mg and 1000 mg - Cataflam 25 mg and 50 mg - Captopril 12,5mg and 25 mg - Carbidu 0,5 mg and 0,75 mg - Clindamycin 150 mg and 300 mg - Mefinal 250 mg and 500 mg

			<ul style="list-style-type: none"> - Glimepirid 1 mg, 2 mg, 3 mg and 4 mg - Meloxicam 7,5mg and 15 mg - Methylprednisolon 4 mg, 8 mg and 16 mg - Simvastatin 10 mg and 20 mg - Thiampycin 500 mg and 1000 mg - Salbutamol 2 mg and 4 mg
AD Pharmacy	11	<ul style="list-style-type: none"> - Andalan and Ventolin Nebules and Andalan FE Ventolin Inhaler - Hufadexta-M and Hufanoxil - Ventolin Nebules and Ventolin Inhaler 	<ul style="list-style-type: none"> - Acyclovir 200 mg and 400 mg - Alofar 100 and Alover 300 - Allupurinol 100mg and 300 mg - Clindamycin 150mg and 300 mg - Fenofibrate 100 mg and 300 mg - Glimepiride 1 mg, 2 mg 3 mg and 4 mg - Omeric 100 mg and Omeric 300mg - Thiamycin 500 mg and 1000 mg

LASA Drug Storage System (Look Alike Sound Alike)

Storage is one of the activities contained in the logistics management cycle. Storage is considered the heart of the logistics management cycle. This is because storage determines the success and smooth distribution or distribution of goods from one unit to another (Istinganah, 2006). Drug storage is an effort to secure the drugs received so that they are safe (not lost), avoid physical and chemical damage, and keep their quality guaranteed (Ministry of Health, 1996).

Table 3: LASA Drug Storage Observation Results

NO	STATEMENT	BJ PHARMACY		NB PHARMACY		AD PHARMACY	
		YES	NO	YES	NO	YES	NO
1.	LASA drugs are not stacked with other drugs.	√		√			√
2.	LASA drugs are stored separately in another line.		√		√		√
3.	LASA drugs are stored in a separate medicine box or medicine box.		√		√		√
4.	LASA drug storage by the "Tall Main Lettering" method.		√		√		√
5.	Labeling "LASA"		√		√		√
6.	There is a list of LASA drugs.		√		√		√

Based on the results of interviews and observations from the three pharmacies located in Besuki District, Situbondo Regency, in the LASA (Look Alike Sound Alike) drug storage system at pharmacies in Besuki District, Situbondo Regency two out of three pharmacies, namely BJ Pharmacy and NB Pharmacy apply the LASA drug storage system (Look Alike Sound Alike) by spacing and separating LASA drugs from other drugs only and not applying other systems such as LASA drugs (Look Alike Sound Alike) stored separately in two rows and group II in another row, LASA drugs (Look Alike Sound Alike).) is stored in a separate medicine box or medicine box, there is a list of LASA (Look Alike Sound Alike) drugs, the use of the LASA label on LASA (Look Alike Sound Alike) drugs, and the use of the Tall Man Lettering method. Meanwhile, 1 out of 3 pharmacies, namely AD Pharmacy, does not implement the LASA (Look Alike Sound Alike) drug storage system at all. It can be concluded that the pharmacy located in Besuki District, Situbondo Regency in the LASA (Look Alike Sound Alike) drug storage system does not meet the regulations or requirements of the LASA (Look Alike Sound Alike) drug storage system. As explained by Singh (2017), in the LASA (Look Alike Sound Alike) drug storage system, LASA (Look Alike Sound Alike) drugs are not stacked together with other drugs, LASA (Look Alike Sound Alike) drugs are stored separately in two rows, with group II in the other row, LASA (Look Alike Sound Alike) drugs are stored in a separate medicine box or medicine box, there is a list of LASA (Look Alike Sound Alike) drugs. In addition, the use of the LASA label on LASA (Look Alike Sound Alike) drugs and the use of the Tall Man Lettering method can also be used (Muhlis, 2019).

Application of the LASA (Look Alike Sound Alike) drug storage system that is not by with existing provisions or regulations can lead to medication errors (Medication Errors), this can lead to serious errors and drugs that cause unwanted drug reactions (Safitri, 2012). In addition, in the preparation of LASA (Look Alike Sound Alike) drugs at pharmacies in Besuki District, Situbondo Regency, the average LASA (Look Alike Sound Alike) drugs are arranged with other drugs and arranged alphabetically.

LASA Drug Service System (Look Alike Sound Alike)

Based on the results of interviews and direct observations, the LASA (Look Alike Sound Alike) drug service system at pharmacies throughout Besuki District, Situbondo Regency, has three pharmacies, namely BJ Pharmacy, NB Pharmacy, and AD Pharmacy, in their service system, have implemented a warning system on the computer or the packaging, conducted two checks, and contacted the doctor to clarify the prescription for LASA (Look Alike Sound Alike) drugs. This is by the provisions of the LASA drug service (Look Alike Sound Alike) which include separating LASA drugs from other drugs, providing installation of a warning system on a computer or the packaging, conducting double-checking of drugs, contacting doctors to clarify prescriptions, and memorizing various LASA drugs (Muhlis, 2019). By the requirements of the LASA (Look Alike Sound Alike) drug storage system, namely at the point of memorizing various kinds of LASA (Look Alike Sound Alike) drugs, 2 of 3 pharmacies located in Besuki District, Situbondo Regency, namely BJ Pharmacy and NB Pharmacy, memorize various kinds of LASA drugs (Look Alike Sound Alike) while 1 of 3 pharmacies in Besuki Sub-district, Situbondo Regency, namely AD Pharmacy, does not memorize various kinds of LASA (Look Alike Sound Alike) drugs. This may be due to the wide availability of drugs in AD pharmacies.

Table 4: LASA Drug Service Observation Results

NO	STATEMENT	BJ PHARMACY		NB PHARMACY		AD PHARMACY	
		YES	NO	YES	NO	YES	NO
1.	Provides an installation of a warning system on the computer or the packaging	√		√		√	
2.	Double-check	√		√		√	
3.	Memorize various kinds of LASA drugs.	√		√			√
4.	Contacting the doctor to clarify the prescription for the LASA drug	√		√		√	

Obstacles

Based on the results of interviews with the three pharmacies located in Besuki Sub-district, Situbondo Regency, which consists of BJ Pharmacy, NB Pharmacy, and AD Pharmacy, the three of them have never encountered problems both in the storage and service of LASA drugs (Look Alike Sound Alike). This may be due to the number of LASA (Look Alike Sound Alike) drugs found in each pharmacy in Besuki District, Situbondo Regency on average ± 10 kinds. In addition, many patients want to buy drugs that include or bring the rest of the pack from the previous drug. The third reason is that pharmacies in Besuki District, Situbondo Regency, namely BJ Pharmacy, NB Pharmacy, and AD Pharmacy, do not apply the LASA drug storage system. Because the three pharmacies are constrained in terms of providing the facilities and infrastructure generally provided at the pharmacy.

Conclusion

This study concludes that the LASA (look alike sound alike) drug storage system at the Apotek Besuki District, Situbondo Regency does not meet the requirements for LASA (look alike sound alike) drug storage. The LASA drug service system (look alike sound alike) at Apotek Se, Besuki District, Situbondo Regency has met the requirements for LASA drug services (look alike sound alike).

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