



The Implementation Evaluation of Drug Demand Plan in Pharmacy Installations of Dr Fauziah Hospital Bireuen Aceh Province

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Abstract

Pharmaceutical services are direct and responsible services to patients related to pharmaceutical preparations with the aim of achieving definite results to improve the quality of life of patients. The unavailability of drugs at the Pharmacy Installation is usually caused by delays in the arrival of drugs after they are ordered because its stock is empty at the distributor. The purpose of this study was to analyze the planned need for drugs that were lacking in the Pharmacy Installation at Dr. Fauziah Hospital Bireuen Regency, Aceh Province in 2021. The research used qualitative design. Characteristics of key informants were Head of Pharmacy Installation, Person in Charge of Pharmaceutical Supplies, Responsible for Pharmacy Warehouse, Responsible for Outpatient Distribution, Responsible for Inpatient Distribution, Pharmacy Installation Administration Officer, Pharmacy Officer, Distributor Officer, while the main informants were employees. Data collection technique was done by using the Triangulation method. Data analysis used descriptive qualitative with data triangulation stages of technique, source and time. The results of the study showed that planning was done by a planning team that had been formed. The drug procurement process more often used the ordering consumption method based on the e-catalog. In the distribution process, it was done by direct distribution. It is expected that it is necessary to improve the Pharmacy Installation of Dr. Fauziah Hospital Bireuen Regency. The Installation party should further improve the Management Information System (SIM) in queuing drug data.

Introduction

Pharmaceutical services are direct and responsible services to patients related to pharmaceutical preparations with the aim of achieving definite results to improve the quality of life of patients. To ensure the quality of pharmaceutical services in hospitals, quality control of pharmaceutical services must be carried out which includes monitoring and evaluation. Pharmaceutical Service Standards in hospitals include management standards for pharmaceutical preparations, medical devices, medical consumables and clinical pharmacy services. Pharmaceutical services are activities that aim to identify, prevent and resolve drug-related problems (Permenkes, 2016).

Pharmaceutical Service Standards in hospitals include management standards for pharmaceutical preparations, medical devices, medical consumables and clinical pharmacy services. Pharmaceutical services are activities that aim to identify, prevent and resolve drug-related problems (Kemenkes, 2016).

Drug management is an important aspect to improve the quality of hospital pharmacy services. The purpose of drug management is the availability of drugs whenever needed, both in terms of type, quantity and quality efficiently. Thus, drug management can be used as a process of driving and empowering all available resources to be utilized in order to realize the availability of drugs whenever needed for effective and efficient operations (Direktorat Jenderal pelayanan Kefarmasian dan Alat kesehatan, 2002). Drug management in hospitals includes the stages of selection, planning and procurement, distribution, and use, which are interrelated with each other, so they must be well coordinated so that each can function optimally. The disconnection between each stage will result in inefficient supply and use of existing drug systems (Quick, 1997).

According to WHO (2018), that in some developed countries the cost of drugs ranges from 10-15% of the health budget, such as in Germany 15% and Japan 19%, while in developing countries this cost is higher, namely 35-66%, for example in Thailand. by 35%, China 45%, Mali 66%, and Indonesia by 39%. According to Scheyer and Friedman (2011), hospitals generally have the largest routine costs in the procurement of pharmaceutical supplies (Kementerian Kesehatan Republik Indonesia, 2019).

Drug spending in developing countries, including Indonesia, is the second largest budget after salaries, which is around 40% of all health operational costs. Drug prices in Indonesia are generally considered expensive and not transparent. The 2018 WHO research showed that for the same drug, the price comparison between one brand and another ranged from 1:2 to 1:5. Health services in hospitals, more than 90% use pharmaceutical supplies, and 50% of all income in hospitals comes from the management of pharmaceutical supplies. Therefore, the management of pharmaceutical supplies must be carried out effectively and efficiently to improve the quality of hospital services (Kementerian Kesehatan Republik Indonesia, 2019).

Based on the Directorate of Pharmaceutical and Medical Devices Development, the logistics management system at the Pharmaceutical Installation includes the stages of planning, budgeting, procurement, storage, distribution, maintenance, elimination and control that are interrelated with each other so that they must be well coordinated so that each can function optimally. The disconnection between each stage will result in inefficient supply and use of existing drugs (Kementerian Kesehatan, 2016).

The Ministry of Health has set strategic plan indicators for 2015-2019 related to pharmaceutical and medical device programs, namely increasing access and quality of pharmaceutical preparations, medical devices and Household Health Supplies (PKRT) (Kementerian Kesehatan Republik Indonesia. 2019).

The results of research on the Planning and Procurement of Antibiotic Drugs in the Pharmacy Installation of Prof. RSUP. dr. R. D. Kandou Manado showed the occurrence of drug shortages, delays in drug delivery, late payments, distributors who were unable to supply drugs due to unavailability of raw materials and inappropriate drug pricing. The use of ABC analysis on the inventory value of antibiotics greatly affects the hospital's budget. This is due to the increased drug purchase budget due to inappropriate drug pricing. The price of one drug item will affect the entire hospital purchase budget (Kementerian Kesehatan, 2016).

Based on the results of research that has also been carried out at the Pharmacy Installation at the Lanto Daeng Pasewang Hospital, Jeneponto Regency, it is carried out every time when the medicine runs out, based on a tender system, which is once a year and direct purchases are based on need, reordering often occurs when the distributor forgets the name of the medicine. , the drug stock is empty at the distributor, the payment for the drug on the order has not been paid off, when the drug ordered has not arrived and when the drug ordered is close to expiry. The steps in re-ordering are lui via telephone and making SP again, the medicine ordered is

sometimes not on time, this is due to the expedition route from the distributor and the budget has not been paid by the hospital (Guswant, 2016).

Based on existing studies showing that the management of drugs that are not smooth and inefficient can cause harm to the hospital, therefore the researchers want to evaluate the implementation of the drug needs plan so that problems and weaknesses in its implementation can be identified so that improvement efforts can be made in order to improve health services to the community.

Based on the preliminary survey, RSUD DR. Fauziah, Bireuen Regency has a problem related to drug shortages. This makes a patient complain because the prescription drugs given are not available and have to buy drugs outside the hospital. Based on the 2018 RKO only 76% of drugs are available, and the remaining 24% are still empty. Meanwhile, based on the 2019 RKO, there are 43 types of drugs listed as empty and not in stock in pharmacy warehouses. Drugs listed as empty include aminofillin tablets, 60 ml soup antacids, 80 mg acetyl salicylic acid, 10 mg diazepam, 500 mg metronidazole, paracetamol infusion and many more. Drugs that are needed by patients but are not available at the Hospital Pharmacy Installation will be at risk of causing various impacts, including the impact on the patient, the impact on the hospital, the impact on the BPJS, and the impact on the partnership between the hospital and BPJS. A pharmacist said that the shortage of the drug had also occurred during the pandemic. Families of patients receiving Contribution Assistance (PBI) the Bireuen Regency Health Social Security Administration (BPJS) said, "The cause of the drug shortage is the increase in patient visits where in 2018 the total patient visits were 2964 people and increased in 2019 to 5068 people. Another cause of drug vacancies is the pattern of disease, there are 10 most diseases hospitalized in RSUD DR. Fauziah, namely Gastritis, Febrile, Bronchial Asthma, Dyspepsia, GEA, HEG + Normal Parturition, Typhoid Fever, COPD, Dengue Fever, and Dengue Haemorrhagic Fever. For outpatient treatment, namely hypertension, gastritis, and diabetes mellitus. In addition, at RSUD DR. Fauziah also has drugs that have expired approximately 30 types of drugs including Meloxicam 7.5 mg around 680, Paracetamol Infusion around 36 bottles, Metronidazole 500 mg around 246. This is due to the number of drugs that are in excess of what is needed, low patient demand for drugs and also for some drugs that have an expiration date of only 1 year.

Regional General Hospital DR. Fauziah, Bireuen Regency, Aceh Province is one of the largest hospitals in Bireuen Regency which has 210 beds, and is one of the referral hospitals in the Bireuendan area and is classified as a Class B Hospital. With this relatively large number, it certainly needs to be addressed by providing effective and efficient services including pharmaceutical services and checking the management of drug supplies so that they are available at pharmacies at the Hospital. Pharmacy Installation at the DR. Fauziah, Bireuen Regency, Aceh Province, manages all aspects related to drugs and medical equipment circulating in hospitals for health services. To that end, the Regional General Hospital DR. Fauziah, Bireuen Regency, Aceh Province, must prepare everything in order to provide excellent service for patients.

Drug planning in RSUD DR. Fauziah, Bireuen Regency, Aceh Province is an activity process in selecting the type, quantity and price of pharmaceutical supplies according to needs and budget, to avoid drug vacancies in storage places. Conducted by the Head of the Hospital Pharmacy Installation assisted by the Head of the Supplies Division and the Planning Team. The methods used in planning are the consumption method, the epidemiological method and a combination of consumption and epidemiology methods. The annual planning calculation was carried out in October of the previous year using data on average drug users/distribution -on average every month (January-September). However, the planning and procurement of drugs at the Pharmacy Installation of RSUD DR. Fauziah, Bireuen Regency, Aceh Province has not been efficient, because there are still drugs that are not yet available.

Based on the results of observations made in the drug storage area of the Pharmacy Installation of RSUD DR. Fauziah, Bireuen Regency, Aceh Province, the preparation of drugs is done alphabetically, and antibiotics are based on type and use, where the drug is stored using pallets and room temperature. There are two rooms that are used for storage, a room for storing drugs and a room for storing medical equipment. However, the space for storing drugs used is still narrow, the shelves for storing drugs are still not enough and there are still several places for storing drugs that should be stored in a cupboard. which is locked but the cupboard is not locked, as well as some medical equipment items are not put in the storage room because the room is narrow and not enough so they are stored outside the room near the storage area.

According to the Regulation of the Minister of Health of the Republic of Indonesia Number 35 of 2014 concerning Pharmaceutical Service Standards in Pharmacies, the storage of pharmaceutical supplies in hospitals is controlled by the head of the pharmacy installation. Storage is carried out in pharmacy depots, laboratories, radiology, polyclinics, treatment rooms and special units. Distribution of pharmaceutical supplies for individual services so that they can be reached by patients, by distributing them to service units such as inpatients, outpatients and pharmacy outside hours for example, a hospital pharmacy which is open 24 hours and an inpatient room that provides emergency pharmaceutical supplies. The distribution service system is carried out by an individual prescription system. However, during direct observation at the hospital there are still some drugs that are not available with a prescription given by doctors both for inpatients and outpatients so that patients have to look for drugs outside the Pharmacy Installation of RSUD DR. Fauziah. The unavailability of drugs at the Pharmacy Installation is usually caused by delays in the arrival of drugs after being ordered because the drug stock is empty at the distributor so that there is a shortage of needed drugs.

Methods

This study uses qualitative research methods as research procedures that produce descriptive data, namely the data collected in the form of words, pictures and not numbers. This research report is in the form of data excerpts from interviews and photographs. The researcher here uses descriptive qualitative research. Description is a description of an event or situation and this descriptive is used to describe various phenomena or symptoms that are observed, either through field notes or recordings. Descriptive qualitative research is carried out in depth and is detailed both from the point of view of the researcher on the subject under study. This study uses a qualitative research method with a case study approach. Case study research focuses intensively on one particular object by studying it as a case. In this case, what will be investigated is a case study on how the drug management system in the Pharmacy Installation of the DR. Fauziah, Bireuen Regency, Aceh Province in 2021. This research was conducted at the DR. Fauziah, which is located on Jalan Mayjen T. Hamzah Bendahara No. 13, Bireuen City, Juang City, Bireuen Regency, Aceh. The time of the research was carried out in February 2021 until the completion of data collection. The determination of informants in the study was carried out using the purposive sampling technique, namely the technique of determining the sample for certain purposes only (Sugiyono, 2012). This means that the selected informants are those who know the problem clearly, to be able to be a good source of data and are able to express opinions properly and correctly. The informants in this study include the following criteria: 1 Head of Pharmacy Installation, 1 person in charge of Pharmaceutical Supplies, 1 person in charge of Pharmacy Warehouse, 1 person in charge of Outpatient Distribution, 1 person in charge of Distribution.

Results and Discussion

Based on the data obtained from the results of the study with 98 respondents, it can be seen in the frequency distribution table as follows:

Table 1. Informant Characteristics

Informant Code	Position	Sum
Informant 1	Head of Pharmaceutical Installation	1 person
Informant 2	Person in Charge of Pharmaceutical Supplies	1 person
Informant 3	Person in Charge of Pharmaceutical Warehouse	1 person
Informant 4	Person in Charge of Outpatient Distribution	1 person
Informant 5	Person in Charge of Inpatient Distribution	1 person
Informant 8	Distributor	1 person

Drug Planning

Planning for drugs and health supplies is one of the decisive functions in the process of procuring drugs and health supplies. The purpose of planning is to determine the right type and amount of medicine and health supplies in accordance with the needs of basic health services (5). Planning of drugs and health supplies is one of the determining functions in the process of procuring drugs and health supplies. The purpose of planning is to determine the type and amount of drugs and medical supplies that are appropriate to the needs of basic health services. Planning for pharmaceutical needs is an activity process in selecting the types, quantities and prices of pharmaceutical supplies that are in accordance with the needs and budget, to avoid drug shortages by using the appropriate method. can be accounted for and the basics of planning that have been determined include consumption, epidemiology, a combination of consumption methods and epidemiology adjusted to the available budget.

This is in line with the guidelines used, namely the Regulation of the Minister of Health of the Republic of Indonesia Number 58 of 2014 which states that there must be a drug planning team in the Hospital Pharmacy Installation. From the results of the study obtained information that the Pharmacy Installation of RSUD DR. Fauziah, Bireuen Regency has a planning team that was formed to prepare for the needs of pharmaceutical supplies, one of which is the need for drugs needed in hospitals.

From the results of interviews and document review, it is known that from the informants' statements, it is known that before preparing the preparation for drug needs planning, first check the stock data of the previous year's inventory, starting with data on pharmaceutical supplies, data on average usage, then data on drugs. Both fast-moving drug data and slow-moving drug data and are not in accordance with the procedures and provisions of the Ministry of Health. However, in practice, sometimes there are problems related to unreadable stock data in the computer if the drug stock is empty or does not come and planning that is not in accordance with the realization of this unreadable stock data will result in not ordering drugs that are actually needed at the hospital.

Constraints or obstacles in planning activities, namely there is no buffer stock, the formulary has not been compiled, computer stock data cannot be read if the drug stock is empty or does not come and planning is not in accordance with realization. Problems that can cause stock outs in the planning process include incompatibility of realization with planning, increasing number of patients and changing consumption patterns. This is not in accordance with the provisions of the guidelines for the management of pharmaceutical supplies owned by the Director General of Pharmaceutical and Medical Devices in 2008 that the consumption method is a method that can be used in determining needs based on real consumption data for the previous period.

Procurement

In the procurement of drugs at the Pharmacy Installation of RSUD DR. Fauziah, Bireuen Regency, used the e-catalog method with E-purchasing or manual order letters in ordering

drugs, and using a credit system in paying for drug orders. Determination of drug procurement time is carried out annually by looking at the last 6 months and 1 drug stock data. But every 3 months monitoring is carried out to see drug stock, if drug supplies are running low and are widely used by patients, the hospital makes monthly orders, orders are made before the specified time period. The obstacles that occur in the procurement process are because the drug stock is empty at the distributor and the distance traveled or the expedition taken is quite far. Then the obstacles faced because the Hospital had debts to distributors that had not been repaid in accordance with the agreed tempo of the agreement.

Reception

The process of receiving and checking incoming goods is carried out by the goods acceptance committee consisting of warehouse officers, pharmacy and logistics officers. The receiving committee and goods inspector match the quantity and type of goods ordered with the goods that arrive, in accordance with the pharmaceutical regulations which follow the hospital accreditation rules. Not only that, in receiving drug supplies there has been a team formed, starting from the process of receiving and monitoring as well as inspection.

Storage

Storage is an activity and maintains by placing received pharmaceutical supplies in a safe place from theft and physical disturbances that can damage the quality of drugs Storage is an activity to store and maintain by placing drugs and medical supplies received in a place that is considered safe from theft. and physical disturbances that can damage the quality of drugs and pharmaceutical supplies.

Distribution

The method of drug distribution carried out at the Pharmacy Installation of RSUD DR. Fauziah, Bireuen Regency, by direct distribution or by conducting ampra. The distribution mechanism starts from a doctor's prescription, then requests for drugs from the pharmacy are then brought to the warehouse. Meanwhile, the Ampra method is carried out by using each unit according to need to the warehouse and then from the warehouse to distribute. The process of delivering the drug to the patient starts from the patient giving the drug prescription to the dispensary officer and then it is processed after that the drug is given to the patient. If the patient is outpatient, then the patient takes the medicine. While inpatients, the delivery of the drugs is accepted by the patient's family. Medicines are given based on a prescription from a doctor.

Distribution starts from a doctor's prescription, then requests for drugs from pharmacies and then brought them to the warehouse. While the Ampra method is used for each unit according to the needs of the warehouse. The delivery of drugs to patients by means of the patient giving a prescription to the dispensary officer then processed after that the drug is given to the patient. In the distribution of drugs, all units are prioritized, but if there is something more urgent, it will be prioritized. The problems in the distribution process are caused by the unavailability of drugs and problems with the transportation equipment used for distributing drugs to the units/depots because the distance between the warehouses is quite far. The observations were made at the pharmacy warehouse of RSUD DR. Fauziah, Bireuen Regency, it is known that the drug warehouse distributes drugs every time there is a demand for drugs from the unit/depot. The drug distribution system is still not running effectively because at the time of observation it was found that there was a lack of compliance in filling out the Usage Sheet and Drug Request Sheet (LPLPO) from the service unit. This causes the inventory in the service unit cannot be controlled properly. This causes a difference between the drugs distributed and the stock in the warehouse.

Availability of Drugs at the Pharmacy Installation of RSUD DR. Fauziah Bireuen

The results showed that there are still frequent drug vacancies in the Pharmacy Installation of RSUD DR. Fauziah, Bireuen Regency. This is because the hospital has debts to distributors that have not been repaid in accordance with the agreed tempo of the agreement or caused by drug vacancies that occur in distributors and delays in distributor relations in distribution. Determination of procurement time is carried out annually using the e-catalog method with the E-purchasing method or manual mail order. Interviews with patients were conducted to determine whether the drugs needed by patients in RSUD DR. Fauziah Bireuen Regency is available based on drug management that has been carried out by the Pharmacy Installation of RSUD DR. Fauziah Bireuen.

Conclusion

The conclusions that can be drawn from this research include: Planning is carried out by a planning team that has been formed. In the planning process to determine drug needs by looking at or checking stock data for the previous year, which was obtained from each unit/depot in the hospital, in the process of determining drug needs the consumption method and epidemiological method were used. Based on the results of the data that has been collected, a Work Plan and Budget are carried out which are needed in planning drug needs. However, drug vacancies still often occur in hospitals due to lack of funds. The obstacles faced in the planning process were because the Management Information System (SIM) was not maximized at the Hospital Pharmacy Installation and the delay in data needed for drugs collected by each unit/depot in the Hospital. The drug procurement process more often uses the ordering consumption method based on the e-catalog with the E-purchasing method or manual order letters in ordering drugs. Determination of procurement time is carried out annually by looking at the data for the last 6 months and the last 1 year, monitoring is also carried out every 3 months. The obstacles that occur in the procurement process are because the drug stock is empty at the distributor and the distance or expedition that is taken is quite far. Then the obstacles faced because the Hospital had debts to distributors that had not been repaid in accordance with the agreed tempo of the agreement.

Suggestion

Pharmacy Installation at RSUD DR. Fauziah, Bireuen Regency, the Installation party should further improve the Management Information System (SIM) in the drug data queue. Pharmacy Installation at RSUD DR. Fauziah of Bireuen Regency should pay off debts that have not been paid by the hospital to the distributor. Pharmacy Installation at RSUD DR. Fauziah Bireuen Regency should need to complete the facilities and infrastructure in the storage and distribution process. For further researchers, it is better to conduct research in a longer period of time so that it can be used as material for assessing the effectiveness of drug management in the Pharmacy Installation of RSUD DR. Fauziah Bireuen Regency for the long term.

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