



Management of Post-Disaster Medicine Logistics at the Pharmacy Installation of Regional Public Hospital Undata of Central Sulawesi Province

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Abstract

The purpose of this research is to find out how the management of post-disaster medicine logistics at the Pharmacy Installation of Regional Public Hospital Undata the research. Method used was qualitative with in-depth interview data collection techniques. Research informants were 6 informants who were determined by purposive sampling technique. The results show that the planning of pharmaceutical supplies at Regional Public Hospital Undata used consumption methods epidemiology. The obstacles to logistical planning for type medicine, a disease trend is changing. Medicine logistics budget in pharmaceutical installations comes from the state budget and BLUD. Procurement of pharmaceutical supplies using the method of direct purchases and E-purchasing, obstacles in the procurement of medicine logistic are still arrears of payment of medicine to distributors. Slow distribution of medicine from distributors and the emptiness of medicine stocks acceptance of pharmaceutical supplies is carried out by the pharmaceutical installation warehouse staff and reception team, there are still obstacles in receiving the time for quality inspection and quantity of logistical goods which quite long. Medicine logistics storage is carried out with the FIFO and FEFO systems with alphabetical storage arrangements, constraints in logistics storage, narrow IFRS repositories. Medicine logistics control was done by taking inventory to find out the quality and quantity of medicine as well as the medicine expired date, the obstacles in controlling medicine logistics time to take stock of hospitalization takes a long time.

Introduction

Tackling health problems in disaster conditions is aimed at ensuring the delivery of health services for victims of disasters and refugees according to minimum standards (Sekar, 2005; Kelman, 2011; Pega et al., 2015). Health crisis management policies include prioritizing the handling of medical emergencies, optimizing routine health services in health facilities,

including drug logistics management which is one of the important aspects in hospitals (Ministry of Health, 2015).

Drug logistics management in the hospital which includes the stages of planning, procurement, storage, distribution, deletion, evaluation and monitoring that are interrelated with each other, so it must be well coordinated so that each can function optimally. Disconnect between each stage will result in inefficiency of the existing drug supply system, thus negatively impacting the quality of service in hospitals (Quick et al, 1997; Bigdeli et al., 2013; Mauliana et al., 2020).

Undata Regional General Hospital of Central Sulawesi Province is the largest hospital owned by the Government as well as a referral hospital of the Regency / City Hospital which has a vision to be the foremost and best Hospital in Central Sulawesi Province. There is an increase in the percentage of the budget for drug preparations in pre-disaster 2018 and in the aftermath of a disaster, but there are still frequent vacancies in the preparation of pharmaceuticals in the Pharmacy Installation. This condition has an impact on the quality of health services at Undata Hospital. One reason is the delay in the distribution of drugs from distributors to the Undata Regional General Hospital.

The purpose of this study was to determine the planning and budgeting, procurement, acceptance, storage and control in the implementation of Post-Disaster Drug Logistics Management at the Pharmacy Installation of the Undata Regional Hospital of Central Sulawesi Province.

Methods

This research is a qualitative research with a case study approach. This research was conducted at the Pharmacy Installation of the Undata Regional General Hospital, Central Sulawesi Province. The research informants were 6 Undata Hospital Pharmacy Installation officers who were determined through purposive sampling technique.

Primary data obtained through in-depth interviews and observation using interview guides. Secondary data were obtained from various sources such as the Pharmacy Installation document of the Undata District General Hospital of Central Sulawesi Province. Data processing in this research is in the form of a matrix that uses a content analysis approach accompanied by theory triangulation.

Results and Discussion

Planning and Budgeting in the Implementation of Drug Logistics Management

The hospital already has a Drug Requirement Plan (DRP), which is issued by the hospital's planning department, which contains detailed budgets for the procurement of drug needs for one year. Data sources can be seen from previous drug consumption patterns with disease patterns / or disease trends that occur. Then from the logistics department submit data on drug use to the head of the installation for re-selection and the head of the installation which determines the type, amount and estimated budget needed while still assisted by the planning department.

For the estimated amount of the budget adjusted to the amount of funds available at the hospital. then the head of the installation proposes planning to the medical support section. The source of the budget for the preparation of medicines comes from the budget funds and Regional General Services Agency (BLUD).

This is consistent with the theory of Malinggas et al., (2015), that drug planning in Permenkes No. 58 of 2014 states that it must consider the available budget, priority setting, remaining

inventory, past period usage data, disease trends, waiting time for ordering and development plan.

There are several obstacles in planning, namely the blankness of drug preparations at the PBF where the drug is ordered, a change in the pattern of disease that will affect the stock of drugs that have been planned for the patient's needs.

Procurement in the Implementation of Drug Logistics Management

The results of interviews with informants indicate that the process of procuring drug preparations at Undata General Hospital uses the direct purchase method and the E-purchasing method. For the E-purchasing method the goods that you want to order have been tendered from the center according to LKPP (Government Service Goods Policy Institute).

Obstacles in the procurement of drug preparations, namely from factories that are sometimes unable to prepare drugs that are ordered or because the drugs are empty. Another obstacle is the late delivery due to the considerable distance. As a result of the earthquake and tsunami disaster some time ago many PBFs (pharmaceutical wholesaler) were damaged, so ordering through Makassar.

Furthermore, the budget is also an obstacle as there are still arrears in payment of drugs to distributors due to the large number of unpaid claims by the government (BPJS/ Social Security Administrator). The next obstacle to procurement in the Pharmacy Management Information System (SIM) installation is not yet perfect because there are still menus in the application that have not been used properly.

Acceptance in the Implementation of Drug Logistics Management

Drug logistics acceptance has been carried out by physically checking the drug logistics that comes to find out the quality and quantity of goods. By checking the Expired Data, checking the medicine packaging and checking the medicine for broken or not. Observation results indicate that for drug reception, pharmacy officials adjust the list of items on the invoice from the distributor with the Order Letter (SP) in the hospital.

There was no change in procedure for receiving pharmaceutical supplies at Undata Hospital Pharmacy Installation after the disaster. Drugs that must be in cold temperatures quickly immediately checked in a box containing ice cool and immediately transferred to the refrigerator so that the temperature is maintained.

Obstacles in the acceptance of drug logistics in the Pharmacy Installation of the Undata Regional General Hospital of Central Sulawesi Province, namely the preparation of drugs which causes a lot of time for quality and quantity checks, longer goods checks. Acceptance is an activity to guarantee the suitability of type, specification, quantity, quality, delivery time and price stated in the contract or order letter with the physical conditions received. All documents related to receipt of goods must be stored properly (Handayani et al., 2018).

Storage in the Implementation of Drug Logistics Management

For drug storage systems in pharmaceutical installations already using FIFO and FEFO systems with alphabetical storage arrangements. For the obstacles faced in the storage of drug preparations in hospital pharmacy installations, namely a narrow drug storage room and problems in the supply of electricity when the electricity fails, because the generator set in the hospital is not functioning properly so many drugs are damaged.

There are SOPs (standard operational procedures) related to drug logistics storage according to the type of drug, for example narcotic drugs which must be in cold temperatures must be in

the refrigerator. Storage of drugs in the installation warehouse also has a FIFO and FEFO system and an alphabetical arrangement.

Control in the Implementation of Drug Logistics Management

Control of drug preparations by pharmaceutical installations is carried out by taking in stock once a month. In doing stock taking, it is constrained when taking stock inventory. Because the number of drugs that are classified as large and examined one by one, causing a lot of time spent on hospitalization stock while the service is still running. For reporting constraints, the results of inpatient stock are often slow because pharmaceutical installations are slow in reporting medical support. Based on observations for drug logistics control variables in the Pharmacy Installation of the Central Sulawesi Undata District General Hospital. For hospitalized stock, it has been carried out well by the installation with examples of hospitalized stock and there are still examples of manual stock cards that were used by pharmaceutical installations to check incoming and outgoing goods.

According to the Minister of Health Regulation No. 30 of 2014, the control of drugs and medical consumables is an activity to ensure the achievement of the desired targets in accordance with the established strategies and programs so that there are no advantages and disadvantages / vacancies of drugs in basic health care units. The aim is to prevent excess and emptiness of drugs in primary health care units. Drug control consists of controlling inventory, controlling usage, handling lost, damaged and expired drugs.

Planning and budgeting in Post-Disaster Drug Logistics Management has not changed and is in accordance with the Minister of Health Regulation (PERMENKES). For planning the needs of drug preparations are proposed by pharmaceutical installations both types, quantities and budget needed. Budget needed through APBN and BLUD (State Budget and Regional Public Service Agency). There is a problem in procurement planning because changes in the pattern of disease cause the medication ordered is not sufficient for the hospital's service needs. Procurement in Post-Disaster Drug Logistics Management has not changed and the process of procurement of pharmaceutical supplies is carried out using the direct purchase method and the E-purchasing method. There are several constraints, namely the stock of drugs in PBF (pharmaceutical wholesaler) sometimes empty, late delivery by distributors, and the arrears of payment of medicines that have not been paid by the hospital. Acceptance in Post-Disaster Drug Logistics Management has not changed and acceptance of drug logistics in hospitals is carried out by a special recipient team.

Examination of goods is carried out by physical check of drug preparations by checking the expired data, checking the quality and quantity of the goods, and checking whether there are damaged drug packages. There are obstacles to the acceptance of drug logistics, namely checking the quality and quantity of drugs that require quite a long time. Storage in Post-Disaster Drug Logistics Management does not change and storage is carried out by warehouse people by implementing the FIFO and FEFO systems with alfabet storage arrangements. To distinguish drugs that are almost the same in pharmaceutical installations also have implemented the LASA system (Look Alike Soon Alike). There is a problem with storage, which is a small storage room, which makes it difficult to store medicines. Control in Post-Drug Logistics Management does not change and control the supply of drugs that are rarely used is done by taking inventory and checking the system, drugs that enter and exit both the pharmaceutical installation and from satellites in the hospital. there are obstacles in controlling that is to take inventory taking takes a long time.

Conclusion

Planning of pharmaceutical supplies at Regional Public Hospital Undata used consumption methods epidemiology. The obstacles to logistical planning for type medicine, a disease trend is changing. Medicine logistics budget in pharmaceutical installations comes from the state budget and BLUD. Procurement of pharmaceutical supplies using the method of direct purchases and E-purchasing, obstacles in the procurement of medicine logistic are still arrears of payment of medicine to distributors. Slow distribution of medicine from distributors and the emptiness of medicine stocks acceptance of pharmaceutical supplies is carried out by the pharmaceutical installation warehouse staff and reception team, there are still obstacles in receiving the time for quality inspection and quantity of logistical goods which quite long. Medicine logistics storage is carried out with the FIFO and FEFO systems with alphabetical storage arrangements, constraints in logistics storage, narrow IFRS repositories. Medicine logistics control was done by taking inventory to find out the quality and quantity of medicine as well as the medicine expired date, the obstacles in controlling medicine logistics time to take stock of hospitalization takes a long time. Suggestions to the IFRS Undata to evaluate each stage in medicine logistic management to minimize existing obstacles so as not to affect the services in the hospital.

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