***OVERVIEW OF DISTRIBUTION OF MEDICINES AND
CONSUMABLE MEDICAL MATERIALS (BMHP) FROM
PHARMACY WAREHOUSE/ PHARMACY DEPOT TO INPATIENT
INSTALLATIONS OF DISEASES IN GENERAL HOSPITAL IN
SOUTH TANGERANG CITY IN 2021***

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ABSTRACT

The problem in distributing pharmaceutical preparations that often occur in hospitals is when medicines arrive late at the hospital pharmacy depot/satellite. Not only employees who feel loss but patients who need medicines are even more harmed because they have to wait for the medicine that comes too late. The type of research used in this study is descriptive qualitative research using case study design. Primary data is obtained from direct observations and in-depth interviews and document studies. This research was conducted in South Tangerang City Hospital from May to June 2021. Based on the results of research obtained for input obtained human resources results in pharmaceutical warehouses are not adequate, infrastructure to distribute medicines and medical materials consumables to the room has not been up to standard. In the process obtained results that have been done by the distribution flow of drugs and medical materials consumables. In the output obtained results there is still a void of drugs. Conclusion In the input of human resources in the Pharmacy Warehouse is not adequate, the infrastructure in distributing medicines and medical materials consumables to the room has not been up to standard. The distribution process has been carried out by the standards of operational procedures in force. At the output is still the discovery of empty drug stocks. Suggest the head of the warehouse to be able to supervise the SOP that the distribution of drugs and BMHP. The need to hold a special trolley addition in the Pharmacy Warehouse to facilitate the distribution of drugs and medical materials consumables.

Keywords: Distributions, Medicines, Consumable Medical Materials

INTRODUCTION

Based on Law No. 44 in 2009 concerning Hospitals, Pharmaceutical Installation is part of the Hospital in charge of organizing, coordinating, regulating, and supervising all pharmaceutical service activities as well as carrying out pharmaceutical technical coaching in hospitals. Management of pharmaceutical preparations and consumables in hospitals must be carried out by the installation of a one-door pharmaceutical system. It's meant by a one-door system is that hospitals only have one pharmaceutical policy including the distribution of pharmaceutical preparations, and consumables that aim to put the interests of patients first (UU Nomor 44, 2009).

Pharmacy services are also supporting services and are the main revenue centers in hospitals. It is seen that more than 90% of health services in hospitals use pharmaceutical supplies (medicines, chemicals, radiological materials, consumable medical materials, medical devices, and medical gases), and 40-50% of the hospital's largest budget comes from the management of pharmaceutical supplies (Febriawati, 2013). The problem in distributing pharmaceutical preparations that often occur in hospitals is when medicines arrive late at the hospital pharmacy depot/satellite. Not only employees who feel loss but patients who need medicines are even more harmed because they have to wait for the medicine that comes too late. In addition, if the required medicine does not exist or is empty then the patient must buy it at an outside pharmacy, if the drug is being needed then it will be fatal for the patient. Therefore, the distribution in hospitals must be improved again to support health for hospital patients (Rusdiana *et al.*, 2015).

Based on the results of research conducted by (Romero, 2013) on The Management of Medicines in Hospital Pharmacies: Logistics Inference in San Francisco, USA obtained the results that from the receipt of drugs from warehouse to hospital pharmacy obtained inefficiency is incorrect drug supply, differences in the number of drugs, long procurement cycles, timely product recalls and improper use of technology.

Other research conducted at the Pharmaceutical Installation of Prof. DR. R. Soeharso Surakarta Hospital still found some problems of inefficiency at the distribution stage, including a mismatch between the physical amount and the stock card of 99.33% (Sasongko Heru, Satibi, 2014). Based on the results of previous research conducted (Rahmayanti, 2017), about the distribution of drugs in the General Hospital of South Tangerang City in 2017 shows that there is still an inaccuracy in the type and number of drugs and BMHP requested with which it is distributed. This makes the nurse feel lost because if the goods are urgent then the nurse must

borrow the goods from another inpatient room and if the goods have been given back by the warehouse officer then the room that borrowed must return the goods that have been borrowed.

Based on the results of preliminary studies through interviews and observations, it is known that south Tangerang City Hospital sets standard operational procedures (SOP) for pharmaceutical installations, one of the Standard Operational Procedures (SOP) is warehouse officers preparing medicines and Consumables Medical Materials (BMHP) according to the request form. But based on the observations there is a mistake of distribution officers in preparing drugs and BMHP in the Installation of Internal Medicine Inpatient so that the occurrence of discrepancies between the demand for goods and distributed goods.

METHODS

The type of research used in this study is descriptive qualitative research using case study design. Observations made in this study is a direct observation through in-depth interviews with informants involved in the distribution of drugs and consumable medical materials at the Inpatient Installation of Internal Medicines In The General Hospital of South Tangerang City. This research was conducted from May to June 2021. The informant in this study was determined by using purposive sampling method, informant research directly determined by researchers by the criteria of informant selection, namely: Key informant chose in charge of Pharmacy Warehouse RSU South Tangerang City, The main informant was chosen in charge of drug distribution and BMHP and the Head of Internal Medicine Inpatient Room of South Tangerang City Hospital, the additional informant was chosen by the Head of Inpatient Pharmacy Depot of RSU South Tangerang City. Primary data was obtained from direct observations on drug distribution activities and consumables at the South Tangerang City General Hospital, as well as in-depth interviews with informants that have been established using interview guidelines. Secondary data is obtained from documentation studies related to the distribution of consumable drugs and medical materials.

RESULTS AND DISCUSSIONS

Based on the results of interviews with several informants related to human resources in pharmacies obtained information that the number of human resources in the Pharmacy is sufficient.

Table 1. Education of Employees in Pharmacy RSU South Tangerang City year 2021

No.	Position	Amount
1.	Pharmacist	7
2.	Bachelor of Pharmacy	10
3.	Diploma	13
4.	SMF	2
Total		34

Source: Document Study

Based on Table 1, it's that the amount of human resources in pharmacies is adequate in terms of the quality of employee education background.

Table 2. Employees in Pharmacy Warehouse RSU South Tangerang City in 2021

No.	Position	Amount
1.	Pharmacist	3
2.	Pharmaceutical technical personnel	1
3.	Logistics	2
Total		6

Source: Document Study and Interview Results

Based on Table 2 known related human resources in The Pharmacy Warehouse is not adequate in terms of the workload of logistics implementers.

Table 3. Nurses' Last Education in Inpatient Installation of Diseases In South Tangerang City Hospital in 2021

No.	Position	Amount
1.	Bachelor of Nursing	4
2.	Diploma	12
Total		16

Source: Interview Results

Based on Table 3 related to human resources in the Internal Medicine Inpatient Room has been sufficient of quality and quantity.

1. Procedure

Based on the observations, the entire workflow of officers in the distribution of medicines and consumable medical materials from the Pharmacy Warehouse to the Pharmacy Depot and the Internal Medicine Inpatient Installation is by the standards of operational procedures that have been made.

2. Facilities and Infrastructure

Based on the results of interview by some informants related to facilities and infrastructure obtained information that the facilities and infrastructure available in the Pharmacy is adequate, but the facilities and infrastructure in the Pharmacy Warehouse are still minimal as it does not have the property rights of vehicles and trolley transport that is not adequate to make officers have problems in conducting distribution.

Process Distribution of Medicines and Medical Materials Consumables RSU South Tangerang City in 2021

1. Administration process

Based on the results of interviews with several informants related to the administrative process obtained information that the administrative process or reporting in the distribution of drugs and medical materials consumables carried out every daily, semester, and yearly period.

2. Information Delivery Process

Based on the results of interviews with several informants related to the news delivery process obtained the results that the process of delivering news using a written method that is the form of a request for goods.

3. Physical Expenditure Process

Based on the results of interviews with several informants related to the process of physical expenditure of goods obtained information that the method used in the process of physical expenditure of goods is the FIFO / FEFO system.

4. Transport Process

Based on the results of interviews with several informants related to the transportation process obtained the results that the distribution transportation process is carried out by warehouse officers. Transport used by nurses and warehouse workers for the distribution of

drugs using a trolley. In the process of transportation is still found deficiencies or obstacles that as the absence of special trolleys for warehouses.

5. Unloading Process

Based on the results of interviews with several informants related to the demolition process obtained the results that the demolition process at the Internal Medicine Inpatient Installation was carried out by nurses and warehouse officers. The stages carried out are checking the goods in the form of a request for goods, handover, and storage of goods.

Output Distribution of Medicines and Medical Materials Consumables RSU South Tangerang City in 2021

In the output obtained results there is still a drug vacancy caused by there are distributors who cancel orders, as well as an extension of the time of delivery of drugs.

Input Distribution of Medicines and Medical Materials Consumables RSU South Tangerang City in 2021

1. Human Resources

According to the Head of Pharmacy Warehouse for Human Resources in Pharmaceutical Installation, the number is enough, but for logistics implementing officers is still lacking because for distribution officers there are only 2 (two) officers, if one of the officers is on leave then the entire workload will be borne by one officer. The deficiency of human resources in this quantity will hinder and affect the services provided, this is in line with the research (Petruta, 2020) regarding the Importance of Human Resources in Increasing Production in Romania obtained the result that the holding of human resource improvement programs can reduce significant losses in the company's production process. Based on the Regulation of the Minister of Health number 72 in 2016 human resources located in pharmaceutical installations must have pharmacists and pharmaceutical technical personnel by the workload and other supporting officers to achieve the objectives and objectives of Pharmaceutical Installation. The availability of human resources in hospitals must be by the provisions of classification and licensing of hospitals established by the Minister.

2. Procedure

Based on Regulation of the Minister of Health no. 72 in 2016, the Implementation of Pharmaceutical Service Standards in Hospitals must be supported by the availability of pharmaceutical resources, organization oriented to patient safety, and standard operating procedures. SPO input can also be seen in terms of implementation and compliance of officers to the SPO, based on the results of the study it is known that the implementation of

officers against SPO distribution of drugs and consumable medical materials has all been implemented. This is in line with the research conducted by (Nanda, 2016) in The Pharmaceutical Wholesaler of Yogyakarta Province that all PBF has had a good enough SOP with an average of 86.3% meets CDOB standards. Standard Operational Procedures are required to facilitate employee control to improve their performance.

3. Facilities and Infrastructure

Based on the regulation of the Minister of Health no. 72 in 2016, facilities are space facilities that must be adequate in terms of quality and quantity to support the function and process of pharmaceutical services, ensure a safe working environment for officers, and facilitate hospital communication systems. Based on the results of the research conducted can be known that the infrastructure facilities used in the distribution process of drugs and medical materials used are sufficient. But there are still some obstacles found that are not appropriate trolley transport in the process of distributing goods owned by pharmaceutical warehouses. Based on the results of research conducted (Danjela, 2019) on Evaluation of Medical Drug Distribution by the Ministry of Health in 5 Selected Health Centers in Lilongwe, Malawi obtained results that (70%) respondents agreed that the warehouse infrastructure was inadequate, (10%) respondents hesitated, while (20%) respondents said that the warehouse is adequate.

Process Distribution of Medicines and Medical Materials Consumables RSU South Tangerang City in 2021

1. Administration process

Based on Regulation of the Minister of Health no. 72 in 2016, the recording and reporting of the management activities of Pharmaceutical Preparations, Medical Devices, and Consumables which includes planning needs, procurement, acceptance, distribution, control of supplies, returns, destruction, and withdrawal of Pharmaceutical Preparations, Medical Devices, and Consumable Medical Materials. Reporting is made periodically conducted pharmaceutical installations within a certain period (monthly, quarterly, semester, or annually). Based on the results of the study, the reporting of documents on the distribution of drugs and consumable medical materials is carried out routinely by both pharmacy officers, pharmacy officers, and the head of pharmaceutical installation. Reports related to the distribution of consumable drugs and medical materials made and reported by officers from the mutation report of pharmaceutical preparations and consumables medical materials and the annual report of pharmaceutical preparations and consumables medical materials. This is

in line with the research conducted by (Satrianegara *et al.*, 2018) in the Pharmacy Warehouse of RSUD Sheikh Yusuf Gowa drug registration in and drug out routinely done because through the recording done the importation and expenditure of drugs can be controlled.

2. Information Delivery Process

The method in the process of delivering news at the General Hospital of South Tangerang City is direct and written communication method by providing a request form for medicines and consumables from the pharmacy to the pharmacy warehouse as well as the request form for consumable medical goods from the inpatient room to the pharmacy warehouse as well as the provision of patient medicine sheets written by the doctor to be given to nurses and then nurses give to pharmacies. Drug distribution starts from the pharmacy warehouse by receiving a drug request sheet from the service unit, then the distribution of the drug adjusts to the existing inventory in the pharmacy warehouse. The pharmacy warehouse provides a schedule of storage to the person in charge of the service unit to make the storage more organized.

3. Physical Expenditure Process

Based on the results of research on physical expenditure system of medicinal goods and medical materials consumables in The General Hospital of South Tangerang City using FIFO / FEFO system so that every inventory of goods in pharmacy warehouses and pharmacies avoid expiration. This is also in line with research conducted by (Wulandari, Indasah, and Suhita, 2020) on Analysis of Drug Logistics Management in Pharmaceutical Installation of Klaten District Health Office, that the arrangement of space and storage of drugs in the installation pharmacies is carried out well according to the procedure, where the drug is stored in a separate room with the preparation of drug stock alphabetically, by the dosage form, with FIFO (First In First Out) and FEFO (First Expired First Out) systems.

4. Transport Process

The process of transporting the distribution of medicines and consumable medical materials at the Inpatient Installation of Internal Medicines of The General Hospital of South Tangerang City is the process of transferring goods after the physical expenditure of goods to the requested goods, including the transfer of medicines and consumable medical materials from the pharmacy warehouse to the pharmacy depot as well as from the pharmacy depot to the inpatient room and from the pharmacy warehouse to the inpatient room. Based on the results of research transport equipment used in the distribution of drugs and

consumable medical materials from pharmacy warehouses to pharmacies as well as from pharmacy warehouses to treatment rooms using trolley and cardboard.

5. Unloading Process

Based on the standard document study of operational procedures, goods that will be received at the Inpatient Installation before demolition must be checked in advance. This is to see if the goods are on-demand both in terms of quantity, and type. Based on the results of the study obtained that before the demolition, the room nurse will check the goods distributed with SBBK brought by the warehouse officer, from the check can be known if the goods are by the ordered. Based on the results of research conducted by (Romero, 2013) on The Management of Medicines in Hospital Pharmacies: Logistics Inference in San Francisco, USA obtained the results that from the receipt of medicines from warehouse to hospital pharmacy obtained inefficiency is incorrect drug supply, differences in the number of drugs, long procurement cycles, timely product withdrawals and improper use of technology.

Output Distribution of Medicines and Medical Materials Consumables RSU South Tangerang City in 2021

The output of the distribution of drugs and medical materials consumables in the Inpatient Installation of Diseases In The General Hospital Of South Tangerang City is the availability of drugs and consumable medical materials that are channeled from Pharmaceutical Installations to Inpatient Installations of Internal Diseases while maintaining the safety, accuracy of type, accuracy of quantity and timeliness at the time of distribution of drugs and medical materials consumables in the Inpatient Installation of Internal Medicines.

The availability of drugs in the General Hospital of South Tangerang City in the period June 2021 found empty stock in the pharmaceutical warehouse in addition some drugs have a low amount. It is known that there are as many as 121 kinds of medicines and 60 types of consumable medical materials. While the stock of drugs that hamper depleted in the period June 2021 is as many as 46 kinds of drugs and 29 types of medical materials used up. Based on the results of the study obtained that the pharmacy warehouse does not have a minimum stock of drugs and medical materials consumables, the minimum amount of stock is only seen from the amount of one distribution. This is in line with the research conducted by (Nesi and Kristin, 2018) at the Pharmaceutical Installation of Kefamenanu Hospital in North Central Timor Regency which is still finding drug vacancies due to the calculation of procurement numbers

and procurement times that are only seen based on estimates so that there are still some drug items that experience drug supply vacancies during the period 2017

CONCLUSIONS AND SUGGESTIONS

Input from the distribution system of drugs and medical materials used in the Inpatient Installation of Diseases In The General Hospital of South Tangerang City is still not good, both from human resources, the infrastructure used in distribution. As for the work procedures, all officers have done the work by the applicable procedures. The work procedures performed are by the Standard Operational Procedures (SOP) that have been established. The process of the distribution system of medicines and medical materials consumables in the Inpatient Installation of Diseases in General Hospital of South Tangerang City has been carried out by the distribution flow of drugs and consumable medical materials. The output of the distribution system of drugs and medical materials consumables in the Inpatient Installation of Diseases in General Hospital Of South Tangerang City there is still a drug vacancy caused by the distributor who canceled the order, as well as the extension of the time of delivery of the drug.

Head of a warehouse to supervise the SPO (Standard Operational Procedure) so that in the implementation of drug distribution and BMHP can run by the standards. The need to hold a special trolley addition in the Pharmacy Warehouse to facilitate the distribution process of drugs and BMHP. It is known that the trolley is damaged and does not match the required transport trolley.

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