

Medicine Logistic Management: A Case Study at Sari Medika Pharmacy Malang

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ABSTRACT

Medicine unavailability and expired of goods, and there's no medicine stock, excess medicine stock which will have retail and business consequences. The medicine logistic management problem that arose at Apotek Sari Medika Malang therefore, it need to evaluate for each process. The descriptive qualitative research aims to explore the theory and laws of medicine logistics management at Apotek Sari Medika Malang, which is appropriate to determine the availability of medicines in the pharmacy. Data collected by interviews with three informants. The results showed medicine logistics management at Apotek Sari Medika Malang has not been running effectively and efficiently. The conclusion is based on the input results such as insufficient medicine storage facilities and improperly implemented procedures according to laws of. The stage of the medicine selection process, the planning process for medicine procurement, procurement, receipt, storage, and control is still not effective, and finally. The output shows that Sari Medika Pharmacy is capable of sufficient medicine availability, but goods can still be found accumulating until death moving and expired date.

Keywords: Effectively, Efficiently, Logistic Management, Medicine



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INTRODUCTION

Analysis of Medicine Logistics Management in the Pharmacy Installation of the Regional General Hospital is one aspect of hospital management that needs to be considered carefully and every operational activity has a relationship that starts with medicine selection, planning of supplies (Malinggas, Posangi, & Soleman, 2015; Fritz, Herrick, & Gilbert, 2021; Wen et al., 2019). Pharmacy, procurement of pharmaceutical supplies, receipt, storage, distribution, destruction and withdrawal, control and administration required for pharmaceutical service activities in the provision of health services as a whole. The inefficiency and no streamlined of medicine management will cause a negative impact to the hospital, both medically and socially economically (Malinggas et al., 2015; Chung et al., 2015).

According to Ekasari (2018), on Medicine Stock Availability Management for the Referral Program (PRB) at the BPJS Kesehatan Jember District Pharmacy Network in 2018, stated that the medical management process was not effective enough. This is because they haven't used a good mechanism in every process of medicine management, seen in terms of process (Objectives, Planning, and Strategy), organizing components (division of labor and coordination), actuating (procurement, acceptance, storage, destruction), controlling (Control, Recording, and Reporting).

Problems experienced when carrying out activities from management at the Sari Medika Pharmacy. One of them occurs because of some problems, inaccurate selection when planning procurement, improper storage, and stock items that have accumulated or stagnant goods occur. This problem results in that it takes a long time to be able to bring in medicines according to a doctor's prescription or a patient's request. The accumulation of goods that occurs causes loss and capital to stop at the pharmacy.

The Sari Medika Pharmacy Storage System should be used the FIFO methods (First in First Out) and FEFO (First Expired First Out). Inspection by the recipient prior to storage of the goods and the storage facilities at the Pharmacy is still less than adequate therefore accumulation of goods due to goods fast-moving and slow-moving is not well ordered. The pharmaceutical supplies destruction is approaching and has an expired date which indicates that the control process has not been carried out properly and methods that do not follow pharmaceutical service standards hence need to be improved more. This problem is fatal if it is sold to patients because it endangers the patient's life. Based on the background above, there are problems regarding the occurrence procurement planning and stockpiling of goods. This shows that medical monitoring and evaluation have not been implemented properly, even though the government has implemented pharmaceutical standards such as recording and reporting of medicine stocks, which are carried out every day. Based on the explanation above, as a researcher, I am encouraged to find out more about medication management in the pharmacy by researching medicine logistics management at the Sari Medika Pharmacy Malang.

METHODS

Approach Qualitative research using the case study method. The data collection of techniques by conducting interviews, participatory observation sheets, and the required documents (Paramita et al., 2021). The steps in analyzing data are by way of:

Data Reduction

According to Miles and Huberman's Model in Hamzah (2020) reducing data means carrying out careful and detailed recording activities. When doing data reduction, it aims to avoid data accumulation, by summarizing, selecting the main thing, focusing on important things, looking for themes and patterns, to get a clearer picture, and later it will simplify the process of collecting the next data. Researchers collect core information, which can then be analyzed and presented. Reducing this data is used to focus research on medicine logistics management at the Sari Medika Pharmacy Malang. At this stage, the researcher rewrites the interview results based on the respondents' answers, and then the researcher chooses which answers are appropriate and which are not following the research question. This sorting transcribed back to be put back into perspective based on research questions.

Data Presentation

According to Miles and Huberman's data analysis steps in Hamzah (2020) After reducing data, the next step is for the researcher to design the presentation of data in the form of narrative text and tables, this is obtained after the researcher completes the preparation of the data so that it can be easily read in the form of a copy of the data which can then be grouped according to the appropriate

relationship pattern. Researchers make data presentations, which can later become a mutually related unit of a series of research focuses or research statements by reviewing field notes and answering briefly to develop conclusions. The presentation of the data used by the researcher is in the form of a brief description in each, so the researcher describes and the results of the research on the problems that have been formulated in Chapter 1, the data described later by the researcher is the result of interviews, observation, and documentation. The stages carried out in the process of presenting this data are compiling the interview draft based on the aspects needed in the research, conducting interviews, conducting documentation to complete the research data, analyzing the results of interview data and observations made. The result of interviews presented as data, which will be compared to theory of medicine logistics management in pharmacies.

Conclusion Drawing / Verification

According to the data analysis steps of Miles and Huberman's model in Hamzah (2020), the final step that the researchers took was drawing conclusions and verification. The initial conclusions put forward are temporary and can change if strong evidence is found and supports the next stage of data collection. Conclude from the results of the interview with respondents, observations, and documentation by looking at the overall results of the inputs, processes, and outputs to understand more clearly the problem of what happened.

Checking the validity of findings

Triangulation sources compare and recheck the correct information by comparing observational data and interview data. This can be done by (1) comparing the observed data with the interview data; (2) comparing what people say in public with what is said in private; (3) comparing what people say about the research situation with what is said over time; (4) comparing a person's situation and perspective with the opinions and views of other people; (5) comparing the interview results with the contents of a related document.

RESULTS AND DISCUSSION

The results of this study consist of input (infrastructure facilities and procedure), process (medicine selection, procurement planning, storage, acceptance, and control), and output (Results and discussion of medicine stock availability at Sari Medika Apotek). Each is described as follows:

Infrastructure Facilities

According to health minister regulations, no 73 of 2016 the pharmaceutical implementation services at pharmacies must be supported by facilities and infrastructure that meet the provisions and applicable laws. Pharmacy facilities and infrastructure must be easily accessible to the public. Pharmacy facilities and infrastructure can guarantee the quality of pharmaceutical preparations, medical devices, and consumable medical materials as well as the smooth running of pharmaceutical service practices. Facilities and infrastructure needed to support Pharmacy Services at the Pharmacy include facilities that have functions. Some of the problems that can be found from this study are the absence of separation of the warehouse space with the Pharmacist Assistant room, making cabinets attached to the wall makes placement. From the observation of facilities and infrastructure at the Sari Medika Pharmacy Malang, it is known that the total area of the room from the pharmacy service or pharmacy service to the storage area and the Pharmacist Assistant room is 5x8m². Meanwhile, according to the Law on the Implementation of Pharmaceutical Services, the placement of infrastructure facilities has separate functions from the prescription reception room, prescription service room and prescription compounding room, delivery room, counseling room, pharmaceutical preparation room, and archive storage room. This is deemed inadequate because the storage area for pharmaceutical preparations is one with another and the cabinets provided are not sufficient because there is an accumulation of goods that are not properly organized. This has negative consequences because this storage has a risk of expired goods.

Procedure

According to Wijaya & Irawan (2018) what is meant by procedure is a sequence of activities that involve several people in one company, to be able to carry out tasks repeatedly in the same way. Therefore, a procedure is something that has been determined to be a written document and cannot be changed. From the research results, conducted by researchers using interviews and observations, it can be concluded that the Sari Medika Pharmacy related to the medical management process does not yet have a written Standard Operating Procedure. As is known, the procedures that have been made are used to ensure that the operational activities of medicine logistics management can run well by utilizing existing resources, to achieve the stated goals because each Pharmacy wants every operational activity to run productively, consistently, systematically, and under control. The implementation of this unwritten procedure resulted in overlooked problems in every important aspect.

Medicine Selection

According to Noviani (2020), the medicine selection function is to increase safety and efficiency, every time you perform pharmaceutical services by having a standard book of medical supplies and medical equipment as a guide. The list of medicines and medical equipment are sorted based on the pattern of prescribing and using medicines taken from a certain period of medicine selection. Based on the research results conducted by the researchers, it can be seen in the selection process or medicine selection at Sari Medika Pharmacy Malang using the Consumption-Based method. The use of this method is based on the real condition of consumption of pharmaceutical supplies with the use of defective books, doctor's requests, and estimated consumption in the period from year to year. In the use of this method, there are several things still ignored during the process, such as calculating the number of pharmaceutical supplies, namely data analysis for information and evaluation, calculating the estimated pharmaceutical needs, and adjusting the amount of pharmaceutical supplies needed with the allocation of funds. The calculation must be done from the data of average usage per month, twelve months of usage needs, safety stock, and waiting time.

Procurement Planning

According to Mumek et al. (2016: 8), including the ABC analysis is a classification method based on a level based on a set of values from the highest to the lowest value and is divided into 3 large groups called A (high investment value), B (moderate investment value), and C (low investment value). Vital, Essential, Non-essential Analysis of determining procurement planning by determining the types of supplies based on vital (must be available), essential (should be available) and, non-essential (should not be a priority).

Based on the discussion above and results, the implementation of medicine procurement planning activities has been carried out by the medicine procurement planning procedures found at Sari Medika Pharmacy. However, to reduce the procurement of more medicines compared to the previous procurement planning, which could result in the accumulation of goods or shortages of goods, Sari Medika Pharmacy needs to re-evaluate procurement planning to control supplies, including utilizing the ABC method analysis by classifying medicines so that the process is processed. Medicine procurement planning runs effectively in determining how many medicines are planned and provided.

Storage

According to the Republic of Indonesia Minister of Health Regulation Number 35 of 2014 concerning Standard of Pharmaceutical Services in Pharmacies Medicines/medicine ingredients must be stored in the original container from the factory. In the case of, exceptions or emergencies where the contents are transferred to another container, contamination must be prevented and clear information must be written on the new container. Containers must at least contain the medicine name, batch number and, expiration date, all medicines/medicine ingredients must be stored in an

appropriate condition, so that safety and stability are guaranteed, the storage system is carried out by taking into account the dosage form and medicine therapy class and arranged alphabetically, Medicine dispensing using the FEFO (First Expiry First Out) and FIFO (First In First Out) systems. In the storage process, several problem aspects can hinder the storage process activities at Sari Medika Pharmacy Malang, namely the absence of using room temperature and cold temperature gauges, so that there is several medicine preparations without temperature monitoring that are damaged. The goods exceeds of capacity at storage area. From the research results, the warehouse area is known to be 5x8m². This is under the warehouse area requirements, but the storage warehouse is one with the place for the process of receiving recipes to compound recipes, so it is inadequate because items are still found tucked away and the goods end up damaged and expired. In the results and discussions of the interview on the storage process, it was found that the storage condition had not implemented the FIFO and FEFO systems to their full potential. The alphabetical method of composing medicines has not yet been implemented perfectly, this is due to the lack of available storage and education for activity implementers. The aspects that need to be reconsidered in the storage process are in-room design, preparation, search, and pharmaceutical supplies, as follows: air exchange, rack fixing and, use of pallets setting aside fire-prone items.

Acceptance

According to Sutarman (2017) the entry of orders or goods that arrive at the reception, quality checks need to be carried out, the amount must be following the order letter, and the crucial thing is to check the documents with documents, and documents with incoming goods. If the order is correct, the inventory is stored in the warehouse.

In the process of receiving goods, problems were still found. Based on information from informants, the problem that often occurs is that the order quantity does not match the order, the goods do not arrive or are different from the invoice received. This, of course, can disrupt the operational activities of the Sari Medika Pharmacy. Based on the research results obtained from interviews and observations, it can be concluded, if the implementation of receipt of goods carried out by Sari Medika Pharmacy has been under the discussion above, but several problems hinder this implementation, namely if there are items ordered that are not suitable because empty, and the time it takes for the ordered item to arrive. To reduce this problem, Apotek Sari Medika needs to optimize its activities to monitor the status of orders so that late arrivals and empty goods do not occur.

Control

According to the Republic of Indonesia Minister of Health Regulation Number 35 of 2014 concerning Pharmaceutical Service Standards in Pharmacies, control is carried out to maintain the type and amount of inventory according to service needs, through order system settings or procurement, storage and, expenditure. This aims to avoid excess, deficiency, emptiness, damage, expiration, loss and, return of orders. Inventory control is carried out using stock cards either manually or electronically. The stock card should at least contain the name of the medicine, the expiration date, the amount of income, the amount of expenditure and, the remaining supply.

The problem that is often experienced by controllers is that they cannot routinely monitor the list of medicines that are close to the expired date and still find medicines that have expired date have not done the separation of goods, this is because the implementation of stock-taking activities is not carried out routinely or on schedule, resulting in inventory planning is hampered. Based on the discussion above, it can be seen if the Sari Medika Pharmacy in implementing control activities does not yet have a method or system to run it. From the results of this study, it is also known that in the logistics management process, they still find damaged goods and goods that have expired dates.

Results and Discussion Medicine Stock Availability at Sari Medika Apotek

According to Ma'rufah and Hidayah (2019) along with the large population and lots of awareness Regarding a proper need as a form of progress in thinking, people hope that the pharmacy will not

only provide good service, but there will be no obstacles such as medicine vacancies due to the low availability of medicines and the lack of available facilities.

From the results of the study, it was found that the overall picture regarding the availability of medicines at the Sari Medika Pharmacy can be fulfilled according to the needs and demands of the patient, but it is still known that there are items that cannot be fulfilled because the empty goods at the distributor and the Sari Medika Pharmacy stocks are estimated less than previously. From the results of this study, it is also known that Sari Medika Pharmacy is still experiencing problems in the form of damage to supplies until the goods have expired or cannot return the goods to distributors. As a result of the empty stock of goods, and the demand for goods that is less than demand, there are not so many rejections of prescriptions because they directly coordinate with the patient and the doctor to allow them to find other medicine substitutes.

CONCLUSION

The conclusion of this research are input, in the logistics management process that influences the overall activity, is the infrastructure and procedures found at Sari Medika Pharmacy. The facilities and infrastructure that are owned are not yet fully adequate, such as storage rooms for medicines that exceed the capacity of medicines, storage places for Narcotics, Psychotropic, certain medicines that are not under the law, places for receiving goods and do not have temperature measuring devices which result in several types of medicine preparations experiencing damage. Meanwhile, the procedures used by the Sari Medika Pharmacy that have been stipulated by the Government have not been implemented properly, because there is no written SOP. Process, with the input constraints, the implementation of the process significantly affects activities because it does not go according to the previous plan. The main thing that gets the impact of the problems on the input is the selection or selection of medicines, the planning process for medicine procurement, procurement, receiving, storage to control which have not been running effectively and efficiently. The next problem that has an impact is the process of withdrawal and destruction, which has not been monitored optimally because the stock-taking procedure has not been well scheduled. Output, from the previous discussion, it can be seen if the availability of medicines at the Sari Medika Pharmacy can generally meet the needs of the patient's demand, however, the availability of medicines cannot be said to have not been under the needs, because there is an accumulation of goods resulting in expired dates.

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