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Analysis of the Procurement Process of Medicine in Pharmacy Installations Lubuk Basung Regional General Hospital

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ABSTRACT

Procurement is an activity carried out exist to provide goods that initially did no exist. The problem with drug procurement that researchers found at the Lubuk Basung Regional Hospital Pharmacy Installation was that there were vacancies in several drug items at distributors so that the drugs that were supposed to be given to patients ran out of stock. The study took place between June and July 2023. In-depth interviews and a document examination were used to acquire data. The results of this research are that the Lubuk Basung Regional Hospital Pharmacy Installation already has an SPO, but the latest SPO has not been issued, planning is carried out to avoid vacancies and excess drug stock which result in expired dates in the Pharmacy Installation. The drug procurement process uses two methods, namely the direct procurement method (e-purchasing & PBF) and the donation method (grants). accordance based on the findings of this inquiry, it can be inferred that the drug planning process there is an SPO and the activities carried out are in accordance with SPO issued. The drug procurement process has been carried out well using two methods, procurement is carried out every 3 months and once a month according to the drug consumption pattern of the previous period. It is recommended to the Hospital the latest SPO be issued immediately, to carry out regular evaluations on every order of goods so that there are no errors or mistakes in receiving the goods.

Keywords: *Planning SPO, Procurement Method, Procurement Process*

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INTRODUCTION

The availability of medicines is a fundamental component of healthcare systems, as it directly influences the quality of medical services, patient safety, and overall treatment outcomes. Medicines are essential not only for curative purposes but also for preventive and promotive health efforts, making their availability a critical indicator of health system performance. Inadequate access to essential medicines can lead to delayed treatment, increased morbidity, prolonged hospitalization, and even mortality. Therefore, ensuring the continuous and equitable availability of medicines remains a global priority, particularly in developing countries where healthcare systems often face resource limitations and logistical challenges.

In Indonesia, challenges related to drug availability remain a significant concern, particularly in health facilities serving patients under the National Health Insurance (Jaminan Kesehatan Nasional/JKN) program. The implementation of JKN has increased the demand for healthcare services, including the need for medicines, thereby placing additional pressure on hospital pharmaceutical management systems. A report by Indonesian Corruption Watch (ICW) identified 85 cases of drug stockouts experienced by JKN patients across several cities, including Banda Aceh, Medan, Serang, and Blitar, based on monitoring conducted from July to December 2018 with a sample of 100 patients in each city. These stockout incidents were attributed to multiple factors, such as delays in drug distribution by pharmaceutical companies, discrepancies in drug demand planning (Rencana Kebutuhan Obat/RKO), arrears in payments by health facilities to suppliers, and irregularities occurring at various stages of drug management, including planning, procurement, and distribution (Anggreini, 2019). These findings highlight the complexity of drug procurement systems and the need for effective management strategies to ensure uninterrupted drug supply.

To address these challenges, the Government of Indonesia has established various policies regulating pharmaceutical services. The Decree of the Minister of Health No. 189/Menkes/SK/III/2006 concerning the National Drug Policy (KONAS) emphasizes that healthcare facilities are obligated to ensure the availability of safe, effective, and quality medicines in sufficient quantities. This policy underscores the importance of systematic drug planning based on accurate data regarding drug consumption patterns and healthcare needs. Rational drug use is also a key principle within this policy framework, ensuring that medicines are prescribed, dispensed, and utilized appropriately, thereby improving therapeutic outcomes while minimizing unnecessary costs and preventing irrational drug use (Kementerian Kesehatan RI, 2006).

Ensuring the continuous availability of medicines is essential across all stages of healthcare services, including promotive, preventive, curative, and rehabilitative efforts. Access to essential medicines is widely recognized as a fundamental human right, as it determines the ability of individuals to obtain appropriate and timely treatment. In this context, drug procurement plays a strategic and central role, as it encompasses activities aimed at fulfilling planned and approved drug requirements.

These activities may include purchasing through official procurement systems, producing pharmaceutical preparations, and receiving medicines through grants or donations (Suryagama &

Satibi, 2019; Faradiba et al., 2022). Effective procurement systems must ensure not only the availability but also the affordability, quality, and timely delivery of medicines.However, despite the existence of policies and structured procurement mechanisms, many studies indicate that drug availability at the healthcare facility level often does not reflect national supply conditions. Ineffective planning, weak inventory control systems, and logistical constraints frequently lead to stock imbalances, including both shortages and overstocking.

Stock shortages can disrupt treatment continuity, while overstocking may result in drug expiration and financial losses. Suryagama and Satibi (2019) reported that although the availability of medicines at the national level may appear adequate, access at the local level is often limited due to inefficiencies in planning and distribution systems. Similarly, Faradiba et al. (2022) highlighted that countries with low- and middle-income economies continue to face systemic barriers in drug procurement, including supply chain disruptions, limited financial resources, regulatory constraints, and inadequate coordination among stakeholders.

From an economic perspective, pharmaceutical expenditures constitute a substantial portion of hospital budgets, particularly in developing countries, where they can account for approximately 40–50% of total operational costs. This significant financial burden necessitates efficient and effective drug procurement and management systems to ensure optimal resource allocation. Inefficiencies in procurement processes can lead to financial losses, increased operational costs, and reduced service quality. Furthermore, poor procurement practices may contribute to drug wastage, expiration, and inequitable access to essential medicines. Limited access to medicines in public health facilities remains a persistent challenge that affects healthcare equity and overall system performance (World Health Organization, 2008; WHO, 2011; Kementerian Kesehatan RI, 2019).

At the institutional level, hospitals play a crucial role in managing pharmaceutical logistics, which includes planning, procurement, storage, distribution, and monitoring of drug use. The effectiveness of these processes is influenced by multiple factors, including the accuracy of demand forecasting, supplier reliability, lead time management, financial capacity, and the integration of information systems. The utilization of digital technologies, such as the Hospital Information Management System (SIMRS), is expected to improve efficiency, transparency, and accuracy in drug management. However, previous studies have demonstrated that the suboptimal use of such systems can result in errors in drug planning and procurement, ultimately leading to stockouts or drug stagnation (Utami et al., 2021). This indicates that technological implementation alone is insufficient without adequate human resource capacity and system optimization.

Based on a preliminary survey conducted through interviews on December 20, 2022, with the Head of the Pharmacy Installation at Lubuk Basung Regional General Hospital, it was found that several challenges persist in the drug procurement process. One of the primary issues identified was the frequent unavailability of drugs at the distributor level, which disrupts procurement activities and delays patient treatment. Such conditions not only affect the quality and continuity of healthcare services but also pose significant risks to patient recovery and satisfaction.

In addition, research by Dwidayati et al. (2024) identified several contributing factors to stockout and stagnation events in hospital pharmacies in Indonesia. These include discrepancies

between stock levels and actual drug usage, inaccurate planning, improper estimation of lead times, shortages from pharmaceutical wholesalers (PBF), and inadequate recording and reporting systems. These findings suggest that drug procurement challenges are multifactorial in nature and require a comprehensive and integrated approach involving planning, management, and coordination among stakeholders.

Despite numerous studies on drug procurement and logistics management, there is still a need for context-specific analysis at the hospital level, particularly in regional hospitals where resource limitations and logistical constraints may be more pronounced. Lubuk Basung Regional General Hospital represents a relevant case for examining the implementation of drug procurement systems in a real-world setting, including the challenges and strategies applied to ensure drug availability.

Given the importance of effective drug procurement in supporting healthcare delivery, it is essential to conduct an in-depth analysis of procurement processes to identify existing gaps and areas for improvement. Therefore, this study aims to analyze the drug procurement process in the Pharmacy Installation of Lubuk Basung Regional General Hospital, focusing on drug planning mechanisms, procurement methods, and implementation processes. The findings of this study are expected to provide valuable insights for improving pharmaceutical management practices and ensuring the continuous availability of medicines to support high-quality healthcare services.

METHODS

This study employed a descriptive qualitative research design to obtain an in-depth understanding of the drug procurement process in the Pharmacy Installation of Lubuk Basung Regional General Hospital. The qualitative approach was selected because it allows researchers to explore processes, experiences, and contextual factors related to drug procurement in a comprehensive and systematic manner.The research was conducted at the Pharmacy Installation of Lubuk Basung Regional General Hospital over a two-month period, from June to July 2023. This setting was chosen based on preliminary findings indicating the presence of challenges in drug procurement, particularly related to stock availability and supply chain issues.The selection of informants was carried out using a purposive sampling technique, where participants were chosen based on their roles, responsibilities, and direct involvement in the drug procurement process. The key informants in this study included the Head of the Pharmacy Installation and the Head of the Pharmacy Warehouse, as they play strategic roles in planning, managing, and supervising drug procurement activities. These informants were considered to have sufficient knowledge and experience to provide accurate and relevant information.

Data collection was conducted through in-depth interviews and document review. The interviews were guided by a semi-structured interview guide to ensure consistency while still allowing flexibility for probing deeper into relevant issues. The interview process explored various aspects of drug procurement, including planning procedures, procurement methods, implementation processes, and challenges encountered. Each interview was conducted directly with the informants, recorded (with consent), and subsequently transcribed for analysis.

In addition to interviews, document analysis was performed to complement and validate the data obtained from informants. The documents reviewed included Standard Operating Procedures (SOPs), drug procurement records, planning documents (RKO), and other administrative reports related to pharmaceutical services. This triangulation of data sources was carried out to enhance the credibility and reliability of the research findings.The data analysis process followed the qualitative data analysis framework consisting of data collection, data reduction, data display, and conclusion drawing/verification. Data reduction involved selecting, focusing, and simplifying raw data obtained from interviews and documents. The reduced data were then organized and presented in a systematic manner to facilitate interpretation. Finally, conclusions were drawn based on patterns, relationships, and themes identified during the analysis process.

To ensure the validity and trustworthiness of the data, several strategies were applied, including triangulation of data sources, prolonged engagement during data collection, and cross-checking information between interview results and documentation. Ethical considerations were also taken into account by obtaining permission from the hospital and ensuring the confidentiality of informants' identities throughout the research process.

RESULTS

The results of this study are presented based on data obtained from in-depth interviews and document review. The findings are organized into several key aspects of the drug procurement system, including planning, procurement methods, and the implementation of the procurement process.

1. SPO Planning

Based on the results of in-depth interviews with key informants and document review, it was found that the drug planning process at the Pharmacy Installation of Lubuk Basung Regional General Hospital has been formally regulated in the applicable Standard Operating Procedures (SOP). These SOPs serve as operational guidelines to ensure that drug planning is carried out systematically, measurably, and in accordance with regulatory standards.

The planning of drug needs is primarily conducted using the consumption method, which relies on historical data of drug usage from previous periods. This approach allows the pharmacy unit to estimate future drug requirements more accurately based on actual consumption patterns. Informants stated that this method is considered practical and effective in minimizing discrepancies between planned and actual drug needs.

In addition, the planning process takes into account several important factors, including budget availability, which determines the range and quantity of drugs that can be procured. Prioritization of essential and frequently used medicines is also applied to ensure that critical drugs remain available at all times. Furthermore, remaining stock levels in the warehouse are carefully evaluated to prevent both shortages and overstocking that may lead to drug expiration.

Other factors considered in the planning process include drug usage trends from previous periods, lead time or waiting time for orders, and future service development plans within the

hospital. These considerations are important to anticipate potential increases in demand due to service expansion or changes in disease patterns. Overall, the findings indicate that the drug planning process has been implemented in a structured manner and follows established procedures, although some limitations still exist in adapting to dynamic supply conditions.

2. Procurement Method

The results of the study show that the drug procurement method at the Pharmacy Installation of Lubuk Basung Regional General Hospital is carried out using two main approaches, namely the direct procurement method and the donation or grant method. The direct procurement method is further divided into e-purchasing and procurement through Pharmaceutical Wholesalers (Pedagang Besar Farmasi/PBF).For drugs that are listed in the national electronic catalog (e-catalogue) and require a procurement budget exceeding IDR 200,000,000, the procurement process is conducted through the e-purchasing system. This system is implemented to ensure transparency, efficiency, and compliance with government procurement regulations. Informants indicated that e-purchasing simplifies the procurement process, as prices and suppliers have already been standardized within the system.

Meanwhile, for drugs that are not available in the e-catalogue or for procurement values below the specified threshold, procurement is carried out directly through PBF. This method provides flexibility in obtaining medicines that are urgently needed but not listed in the official catalog. However, informants also highlighted that this method may be more vulnerable to challenges such as price variability and dependence on supplier availability.In addition to these methods, the hospital also receives drugs through donations or grants, although this occurs less frequently and depends on external support. These donations can help supplement drug availability, particularly during shortages or emergency situations.

Overall, the use of multiple procurement methods reflects an adaptive strategy to ensure drug availability under varying conditions. However, the effectiveness of these methods is influenced by external factors such as supplier reliability, stock availability at the distributor level, and administrative processes.

3. Drug Procurement Process

Based on the findings obtained from interviews and document analysis, the drug procurement process at the Pharmacy Installation of Lubuk Basung Regional General Hospital has generally been implemented in accordance with the Regulation of the Minister of Health Number 72 of 2016 concerning Pharmaceutical Service Standards in Hospitals, as well as internal hospital policies outlined in the Director's Decree Number 001-IFRS/2017 on Pharmaceutical Service Policy.The procurement process begins with the preparation of drug requirements based on previously conducted planning. Once the required drugs have been identified, the procurement unit proceeds with price negotiations with suppliers. This stage is documented through official minutes of negotiation, which serve as evidence of agreement between the hospital and the supplier.

Following the agreement, an order is placed with the selected distributor or supplier. The delivery process is then carried out according to the agreed schedule. Upon receipt of the drugs, a verification and inspection process is conducted to ensure that the quantity, type, and quality of the drugs match the purchase order. This inspection is a critical step in maintaining the quality and safety of pharmaceutical supplies.If discrepancies are identified, such as incorrect quantities, damaged products, or expired drugs, the pharmacy unit prepares an official report and initiates a return process in accordance with the prior agreement with the supplier. This mechanism ensures accountability and protects the hospital from financial and operational losses.

The frequency of drug procurement is generally carried out monthly and every three months, depending on drug consumption patterns and stock levels. This periodic procurement system is intended to maintain optimal stock levels while reducing the risk of both shortages and overstocking.Despite the overall compliance with established procedures, informants revealed that challenges still occur, particularly related to drug shortages at the distributor level, delays in delivery, and fluctuations in drug demand. These issues indicate that while internal processes are well-structured, external supply chain factors continue to influence the effectiveness of drug procurement.

DISCUSSION

The findings of this study indicate that the drug procurement system at the Pharmacy Installation of Lubuk Basung Regional General Hospital has generally been implemented in accordance with established procedures and national regulations, particularly in terms of planning, procurement methods, and procurement processes. In the planning stage, the use of the consumption method based on previous drug usage data reflects a rational and data-driven approach to forecasting drug needs.

This method enables the pharmacy unit to estimate demand more accurately and reduce the risk of stock imbalances, including both shortages and overstocking. The consideration of multiple factors such as budget availability, prioritization of essential medicines, remaining stock levels, lead time, and service development strategies further strengthens the planning process. These findings are consistent with the Regulation of the Minister of Health Number 72 of 2016, which emphasizes that drug planning must ensure the availability of medicines in the right type, quantity, and timing while maintaining efficiency.

Similar results have been reported in previous studies, such as Wilma and Malota (2019), which highlight that consumption-based planning remains a widely applied and effective approach in hospital pharmacy management. However, despite the structured planning system, the persistence of drug shortages suggests that external factors, particularly supply chain constraints and distributor limitations, continue to influence the effectiveness of planning outcomes.

In terms of procurement methods, the application of two main approaches—direct procurement (e-purchasing and procurement through pharmaceutical wholesalers/PBF) and donation or grant mechanisms demonstrates flexibility in addressing drug availability challenges. The implementation of e-purchasing for drugs listed in the electronic catalog with higher

procurement values aligns with government regulations aimed at promoting transparency, efficiency, and accountability in public procurement.

Meanwhile, direct procurement through PBF provides an alternative solution for obtaining drugs that are not listed in the e-catalog or are urgently needed. This dual approach allows the hospital to adapt to varying procurement conditions; however, it also introduces potential challenges, such as dependency on supplier availability and variability in pricing. Compared to previous research conducted by Suryanti (2016), which identified direct appointment as the primary procurement method, the findings of this study indicate a more diversified procurement strategy. Nevertheless, the procurement methods applied at Lubuk Basung Regional General Hospital remain in compliance with national regulations, which recognize direct procurement, production, and donation/grant as valid mechanisms for acquiring medicines.

Furthermore, the drug procurement process itself has been carried out systematically, beginning with planning, followed by price negotiations, ordering, receiving, and verification of goods. The presence of documented negotiation processes and verification procedures indicates a structured and accountable system. The implementation of routine inspections upon receipt of drugs ensures that the quality, quantity, and specifications of medicines are consistent with procurement agreements. In cases of discrepancies, such as damaged or insufficient goods, the availability of formal reporting and return mechanisms reflects good governance and risk management practices.

The frequency of procurement, conducted monthly and quarterly depending on consumption patterns, also indicates an effort to maintain optimal stock levels while minimizing waste due to expiration. These findings are in line with previous studies, such as Siska and Jebesar (2022), which emphasize the importance of balancing supply and demand to prevent stock imbalances. However, the study also reveals ongoing challenges, including delays in distribution, stock shortages at the supplier level, and fluctuations in drug demand. These issues highlight the need for improved coordination between hospitals and suppliers, as well as the optimization of inventory control systems, including the use of accurate lead time estimation and real-time data management. Overall, while the internal drug procurement system has been implemented effectively and in accordance with regulations, external factors related to the supply chain remain significant barriers that require strategic interventions to ensure consistent drug availability and improve the quality of healthcare services.

CONCLUSIONS

Based on the findings of this study, it can be concluded that the drug procurement system at the Pharmacy Installation of Lubuk Basung Regional General Hospital has generally been implemented in accordance with established Standard Operating Procedures (SOPs) and relevant national regulations. The drug planning process is carried out systematically using the consumption method, which relies on historical drug usage data to estimate future needs. Planning activities are conducted annually and are periodically reviewed during the procurement cycle to ensure alignment with actual consumption patterns and service demands.

In terms of procurement methods, the hospital applies two main approaches, namely direct procurement (including e-purchasing and procurement through pharmaceutical wholesalers/PBF) and the donation or grant method. These approaches provide flexibility in fulfilling drug needs under different conditions and support the continuity of pharmaceutical services. The procurement process itself is carried out in a structured manner, starting from planning, price negotiation, ordering, receiving, and verification of goods, which reflects adherence to established procedures and good governance practices.

Furthermore, procurement activities are conducted periodically, either monthly or every three months, depending on drug consumption patterns and stock conditions. This approach aims to maintain optimal stock levels and minimize the risks of both shortages and overstocking. Overall, the drug procurement process can be considered effective and well-implemented within the internal management system of the hospital.

However, despite these strengths, several challenges remain that may affect the effectiveness of drug procurement. These include drug shortages at the distributor level, limited availability of raw materials, withdrawal of distribution permits, and fluctuations in drug demand. These issues indicate that external factors, particularly those related to the pharmaceutical supply chain, continue to play a significant role in determining drug availability.

Therefore, it is recommended that the hospital strengthen coordination with suppliers, improve monitoring and evaluation of procurement activities, and optimize the use of information systems to enhance accuracy in planning and procurement. Continuous improvement in these areas is essential to ensure the sustainable availability of medicines and to support the delivery of high-quality healthcare services.

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