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Evaluation of Drug Planning and Procurement at UPT Babulu Health Center North Penajam Paser Regency

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Abstract
Medicine planning and procurement are two important steps in fulfilling the need of medicines in a certain unit of health service. Drug planning is a process of selecting drugs and health supplies to determine the type and amount of drug in order to meet drug needs at the puskesmas. Planning for drug needs at the UPT Babulu Health Center is still not in accordance with real needs. The objective of this research is to evaluate the planning and procurement of drugs at the UPT Babulu Health Center Penajam Paser Utara. This type of research is a qualitative research with in depth interview method, the data is collected by means of observation, documentation, and the validity of the data using triangulation techniques. There are 4 (four) informant, namely The Head of the Babulu Health Center , The Person in Charge of the Drug Warehouse of the Babulu Healt Center, The Head of the Pharmaceutical Installation and the Pharmacist of the Babulu Health Center. The result of the study showed that there was a shortage of medicines at the Babulu Health Center due to a mismatch between the demand from the Puskesmas and the amount distributed by supplier (Penajam Paser Utara Health Department) and the delivery time to the Puskesmas which was quite long. Drug planning using the ABC method is helfful in overcoming these problems, so that the drug shortage at the Babulu Health Center can be overcome.

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1. INTRODUCTION

Health services are a vital part of national health development that aims to improve public health. According to Azwar (2010), health services are efforts carried out to maintain and improve health, prevent and treat diseases, and restore the health of both individuals and community groups. In the context of first-level services, the Indonesian Minister of Health Regulation No. 43 of 2019 states that the Community Health Center is a basic health service facility that organizes first-level public health efforts (UKM) and individual health efforts (UKP) in a comprehensive, integrated, and sustainable manner. One important component in supporting these services is the availability of drugs. Without proper planning and procurement of drugs, the quality of health services is disrupted, which can ultimately have an impact on public trust and satisfaction with the health facilities concerned.

Drug planning and procurement activities at the Health Center have a crucial role in the management of health service logistics. Drug needs planning must be able to guarantee the accuracy of the type and quantity of pharmaceutical supplies so that there is no excess (overstock) or shortage (understock) of drugs. Balqis et al. (2012) stated that inappropriate

planning, such as selecting goods whose procurement exceeds needs, can disrupt the logistics management cycle and cause waste, inflated procurement costs and potential damage or expiration of drugs. Therefore, good drug management must include the stages of planning, procurement, storage, distribution, and evaluation. According to Sulistyowati et al. (2020), drug management at the Health Center is an indicator of the quality of pharmaceutical services and has a major impact on the high health service budget.

Furthermore, Asnawi et al. (2019) explained that drug management aims to ensure the accuracy of the quantity and type of pharmaceutical supplies by utilizing available resources such as manpower, funds, and software. This activity includes the planning, procurement, receipt, storage, control, and reporting processes, all of which aim for efficient and effective budget use. Meanwhile, according to the Indonesian Ministry of Health (2016), drug management must also ensure the availability of efficient and rational pharmaceutical supplies and disposable medical materials (BMHP) so that the quality of health services can improve. However, if it is not in accordance with the procedure, drug management can cause various problems such as stock shortages, budget waste, and even the risk of drug expiration or damage (Khairani et al., 2021).

Inaccurate drug planning is the main cause of the mismatch between demand and availability. Therefore, a more appropriate method is needed in calculating needs. Currently, the consumption method is still widely used in Puskesmas, which relies on previous year's drug usage data based on LPLPO reports. However, this method often produces estimates that do not match the real needs in the field. According to the Ministry of Health (2010), there are seven indicators used to assess drug availability, including the level of adequacy, compliance with DOEN/Fornas, and the level of drug shortages. The mismatch between the plan and the realization of drug distribution from the health office can cause stock shortages, especially for critical items.

To overcome this problem, the ABC (Always, Better, Control) analysis method has begun to be widely applied in drug planning and procurement management. This method classifies drugs based on their investment value and consumption level, making it easier to make procurement priority decisions (Syavardie and Yolanda, 2022). Tandah et al. (2024) stated that ABC analysis is effective in identifying items with high economic value that require greater attention. Research by Moga et al. (2022) at the Pharmacy Installation of Robert Wolter Mongisidi Hospital showed that the application of the ABC method was very effective in overcoming the mismatch between drug planning and distribution. The results of this study were reinforced by Ariya (2021) who found that the application of the ABC method to drug procurement based on the most common diseases helped to prioritize procurement in a more structured and efficient manner.

The Babulu Health Center UPT as one of the health facilities in Penajam Paser Utara Regency, has its own challenges in drug management. Based on the 2022 District Health Profile, the budget for drugs is only around 7.70% of the total health budget, even though the Babulu Health Center's working area is quite large and covers five villages with a population of more than 20,000 people. Initial survey results show that from 2022 to 2023 there has been a significant shortage of drugs. In 2023, only 80% of drug requests were met according to type. The mismatch between demand and distribution from the health office, as well as the long delivery time, are the main causes of the shortage of drug stocks at the facility.

Seeing these problems, it is necessary to conduct an in-depth evaluation of the drug planning and procurement system at the Babulu Health Center UPT, especially by examining the effectiveness of the methods used, including the application of the ABC method. This evaluation is important to ensure that the planning and procurement process runs according to guidelines and is able to reflect the real needs of the community in the

Puskesmas work area. This study also aims to see the extent to which the contribution of successful drug planning and procurement in supporting the improvement of the quality of health services. It is hoped that the results of this study can provide practical input for Puskesmas managers and strengthen the theoretical basis in the development of drug logistics management at first-level health facilities.

2. RESEARCH METHOD

This study uses a descriptive qualitative approach with the aim of gaining an in-depth understanding of the drug planning and procurement process at the Babulu Health Center UPT, Penajam Paser Utara Regency. This approach was chosen because it is able to describe in detail and holistically the phenomena that occur in the field through direct interaction with informants and analysis of relevant documents (Moleong, 2017).

Location and Time of Research

This research was conducted at the Babulu Health Center UPT, located in the Babulu District, Penajam Paser Utara Regency, East Kalimantan. The research implementation period took place from January to April 2024, starting from the submission of research permits, implementation of data collection, to the data analysis process and preparation of reports.

Informants and Determination Techniques

The informants of this study were selected purposively, namely based on certain criteria that are relevant to the research objectives. There are four main informants, namely:

1. Head of UPT Babulu Health Center
2. Responsible for Drug Warehouse
3. Head of Pharmaceutical Installation
4. Pharmacist at Babulu Health Center

The selection of informants was carried out because they were parties directly involved in the planning and procurement process of drugs at the Babulu Health Center UPT.

Data Collection Techniques

Data was collected through three main techniques, namely:

1. In-depth interviews with informants to obtain direct information regarding drug planning and procurement systems and practices.
2. Direct observation of drug management activities in the warehouse and pharmacy installation of the Health Center to obtain contextual and visual data on the practices carried out.
3. Documentation study, namely by reviewing documents such as Drug Usage Reports and Request Sheets (LPLPO), Standard Operating Procedures (SPO), drug procurement and distribution documents, and stock opname data.

Data Analysis Techniques

The data obtained were analyzed using interactive model data analysis techniques according to Miles and Huberman (2014), which include three main steps:

1. Data reduction: The process of selecting, focusing, simplifying, and transforming raw data obtained from the field.
2. Data presentation: Arranging reduced data in narrative, table, or graphic form to facilitate drawing conclusions.
3. Conclusion drawing and verification: Summarizing patterns, themes, and relationships that emerge from the data and verifying them through re-testing and data triangulation.

Data Validity Test

To ensure the validity of the data, this study uses triangulation techniques, both source and technique triangulation. Source triangulation is done by comparing information from various informants, while technique triangulation is done by comparing the results of

interviews, observations, and documentation. In addition, member checking is carried out on informants to ensure that the data obtained is in accordance with the facts in the field (Sugiyono, 2019).

3. RESEARCH RESULTS AND DISCUSSION

The results of the study indicate that the drug planning process at the Babulu Health Center UPT has not been fully effective and efficient. Planning still uses the consumption method, which is based on the average use of drugs in the previous year. Although this method is commonly used, in practice it often does not reflect the real needs of the community. This causes a discrepancy between the number of drugs planned and the actual needs in the field. LPLPO data used as a basis for planning is not always accurate due to delays in data collection, lack of training of officers in filling in, and lack of coordination between fields in the process of inputting drug needs data.

This condition has an impact on the occurrence of drug shortages that are quite often experienced at the Babulu Health Center, especially in 2022 to 2023. The results of interviews with the Head of the Health Center and the Person in Charge of the Drug Warehouse revealed that only around 80% of the total demand for drugs can be met by the Penajam Paser Utara Regency Health Office. This discrepancy is also exacerbated by a slow and untimely distribution system. Several types of essential drugs have been out of stock for more than a month. This shortage hampers the service process and raises complaints from the public, which ultimately has an impact on decreasing trust in the quality of services at the Health Center.

In an effort to overcome this problem, UPT Puskesmas Babulu began implementing the ABC (Always, Better, Control) method as an approach in drug management and planning. This method aims to classify drugs based on their use value and economic value, thus helping in determining procurement priorities. Based on the results of identification using the ABC method, drugs are classified into three categories: category A (high value and high frequency of use), category B (medium value), and category C (low value). By implementing this method, Puskesmas management can focus more on procuring drugs included in category A, thus avoiding inefficient spending and reducing the risk of shortages for the most needed drugs.

Data triangulation through documentation, direct observation, and interviews strengthens the finding that ABC-based planning is more effective than the consumption method alone. The observation results show that the preparation of drug requirement plans using the ABC method produces more realistic planning and is based on investment value data. For example, of the 40 essential drug items used as samples, 10 items are included in category A which absorbs more than 70% of the budget. By focusing on these items, logistics management becomes more focused and efficient. This is in line with the findings of Moga et al. (2022) and Tandah et al. (2024), which state that the ABC method can increase efficiency and control over drug management in health care facilities.

In addition to increasing the effectiveness of planning, the results of the study also show that the drug procurement system still has structural obstacles. Drug procurement is still very dependent on the central system run by the District Health Office. The request to the distribution process is often delayed due to the length of administrative procedures and the lack of control at the Health Center level over delivery times. In this context, it is important to have an integrated monitoring and evaluation system between the Health Center and the Health Office, so that the distribution process can be more responsive to urgent needs.

In further discussion, it was found that the success of drug management is not only determined by the planning method, but also by the competence of human resources, information technology support, and an effective monitoring system. Lack of training for

pharmacists and warehouse officers is the main factor causing data inaccuracy and suboptimal decision making. In addition, the unavailability of a digital-based logistics information system hampers the process of tracking stock and demand in real time. In fact, according to Sulistyowati et al. (2020) and Syavardie & Yolanda (2022), the integration of information technology in the pharmaceutical logistics system plays a very important role in increasing the efficiency and transparency of management.

Overall, the implementation of the ABC method has had a positive impact on the drug planning and procurement process at the Babulu Health Center UPT. However, the success of overall management requires synergy between the right method, competent human resources, and an adaptive management system. This study provides a practical contribution to improving the drug management system at primary health facilities, and emphasizes the importance of periodic evaluation of the policies and operational systems used. This kind of evaluation is very important in efforts to improve the quality of health services that are more competitive and equitable.

4. CONCLUSION

This study confirms that the effectiveness of drug planning and procurement at the Babulu Health Center UPT is still constrained by the inaccuracy of the needs calculation method, weak coordination between institutions, and limited human resource capacity. The use of the consumption method as the main approach has proven to be unable to reflect the real needs of the community, thus contributing to stock shortages as seen from the fulfillment of only ±80% of drug demand throughout 2022–2023. This constraint is exacerbated by the slow centralized distribution process and minimal control at the health center level, so that the availability of essential drugs is often late and the quality of service is also affected.

The implementation of ABC (Always, Better, Control) analysis has been proven to increase the accuracy of procurement priority determination: 10 category A drug items absorb >70% of the budget, so that the focus of management can be shifted to high-risk groups for shortages and have high economic value. This method, when combined with routine data updates and a digital-based logistics information system, can improve budget efficiency, minimize excess stock, and reduce the frequency of drug shortages. This finding is in line with the studies of Moga et al. (2022) and Tandah et al. (2024), which prove the effectiveness of the ABC method in controlling costs and increasing drug availability in health facilities.

In order for continuous improvement, three aspects need to be synergized: (1) updating the planning method combining ABC analysis with morbidity modeling and the latest patient visit data; (2) improving the competence of pharmacists through technical logistics training and the use of information systems; and (3) establishing an integrated monitoring & evaluation mechanism between the District Health Office and health centers to reduce distribution waiting times. This study also recommends the development of a real-time online stock reporting module and the implementation of periodic logistics audits to ensure data accuracy. The limitations of the study, namely the relatively small number of informants and the focus on one health center, open up opportunities for comparative research between health centers or across districts to test the generalizability of the findings and assess their economic impact more broadly.

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6. BIBLIOGRAPHY

Adib, A. A., & Hasanah, Z. U. (2023). Evaluasi Program Pembelajaran Sebagai Upaya Peningkatan Nilai Rapor Pendidikan Tahun 2022 Di SMPN 4 Kebumen. Jurnal Psikolog, 19(1), 57–62.

Aditama, T.Y. (2007), Manajemen Administrasi Rumah Sakit. 2nd edn.Jakarta: UI Press Agasisti, T., & Mustofa, I. (2022). "Logistics Management: Key to Competitive Advantage." Journal of Supply Chain Management, 35(2), 120-135.

Ahsan Nadya, Disa Devia, & Gusmaneli. (2024). Hakikat Evaluasi (Pengertian Pengukuran, Penilaian, Evaluasi; Fungsi & Tujuan Penilaian, Ciri-Ciri Penilaian Pendidikan). Jurnal Manajemen Dan Pendidikan Agama Islam, 2(2), 228–233.

Anonimous, (2008). Pedoman Teknis Pengadaan Obat Publik dan Perbekalan Kesehatan Untuk Pelayanan Kesehatan Dasar. Ditjen Yanfar dan Alkes Jakarta.

Ariya I. 2021. Analisis Pengadaan Obat dari 10 Penyakit Terbesar di Puskesmas Kabupaten Barru dengan Metode ABC. Skripsi, Universitas Islam Negeri Alauddin Makassar.

Arsyila, S., & Budiwitjaksono, G. S. (2024). Analisis Ketidaksesuaian Hasil Stock Opname Pada Gudang Persediaan Obat Rumah Sakit XYZ. Jurnal Bisnis, Logistik Dan Supply Chain, 4(2), 55–61.

Azha'rah, F., Rizqiyana, F., Listina, O., & Fahamsya, A. (2024). Evaluasi Perencanaan Dan Pengadaan Obat Di Puskesmas Kedungbanteng Kabupaten Tegal Tahun 2023. AKFARINDO, 9(2), 109–115.

Azwar, A. (2010) Pengantar Administrasi Kesehatan. 3rd edn. Jakarta: Binarupa Aksara.

Caroline, I., Fudholi,A., Endarti, D.2017. Evaluasi Ketersediaan Obat Sebelum dan Sesudah Implementasi JKN Pada Puskesmas Di Kabupaten Keerom Provinsi Papua. Jurnal Manajemen dan Pelayanan Farmasi. Vol.7.No. 1.

Christopher, M. (2022). "Supply Chain Management: A Strategic Perspective." International Journal of Logistics Research, 27(1), 45-60.

Diana, A., Nizar, & Sari, R. (2023). Evaluasi Program Pendidikan. Jurnal Studi Islam Indonesia (JSII), 1(1), 157–166.

Embrey, M., Ryan, M, 2012. Managing Access to Medicines and Health Technologies, Management Sciences for Health. USA: Kumarian Press.

Firdaus, D. R., Hariyati, N., & Amalia, K. (2024). Menguak Fondasi Evaluasi Pendidikan: Sebuah Kajian Landasan Teoritis Evaluasi Pendidikan. EDUKATIF : JURNAL ILMU PENDIDIKAN, 6(3), 2843–2851.

Fitria, N. A., Julyanur, M. Y., & Widyanti, E. (2024). Langkah-langkah Evaluasi Pembelajaran. PUSTAKA: Jurnal Bahasa Dan Pendidikan, 4(3), 285–294.

Fitriadi, A. M. K., Syakhroni, A., & Mas'idah, E. (2023). Analisis Persediaan Bahan Baku Dengan Metode Analisis Always Better Control (ABC) Dan Metode Economic Order Quantity (EOQ). Jurnal Teknik Industri (JURTI), 2(1), 20–28.

Hariyoko, Y., Jehaut, Y. D., & Susiantoro, A. (2021). Efektivitas Pelayanan Kesehatan Masyarakat Oleh Puskesmas Di Kabupaten Manggarai. Jurnal Good Governance, 17(2), 169–178.

Ilahi, N., & Ali, S. (2022). "The Role of Technology in Modern Logistics Management." Journal of Operations Research, 40(3), 78-91.

Iskandar, H., & Prasetya, N. (2024). Kepuasan Pasien Tentang Pelayanan Kefarmasian di Apotek Penggilingan Baru Jakarta Timur Periode Maret – April 2024. Jurnal Ilmiah Farmasi Terapan & Kesehatan, 2(3), 20–31.

Jailani, M., Miranda, A., Taufikurrahman, M., & Al Faruqi, M. I. H. (2024). Implikasi dan Konsep Dasar Evaluasi dalam Pembelajaran Nahwu dan Shorof di Pesantren. Journal of Education Research, 5(4), 4496–4505.

Kementrian Kesehatan RI, 2010 Materi pelatihan Manajemen Kefarmasian di Instalasi Farmasi Kabupaten/Kota, Direktorat Bina Obat Publik Dan Perbekalan Kesehatan Direktorat Jenderal Bina Kefarmasian dan Alat Kesehatan Kementrian Kesehatan RI, Japan International Coorperation Agency (JICA)

Kementrian Kesehatan RI, 2014. Peraturan Menteri Kesehatan Republik Indonesia Nomor 30 Tahun 2014 Tentang Standar Pelayanan Kefarmasian di Puskesmas, Jakarta.

Kementrian Kesehatan RI, 2015. Rencana Strategis kementrian Kesehatan tahun 2015-2019. Kementrian Kesehatan RI, Jakarta.

Kementrian Kesehatan RI, 2019. Peraturan Menteri Kesehatan Republik Indonesia Nomor 43 tahun 2019 Tentang Pusat Kesehatan Masyarakat, Jakarta.

Krisogonus, Elprino. 2020. Analisis Perencanaan Obat Di Puskesmas Campurejo dari Tahu 2015 dan 2016 Kota Kediri. Kediri.

Lukas, D. and Rumsari, H. 2004. Manajemen Logistik. Jakrta: Grasindo.

Magdalena, I., Hidayati, N., Dewi, R. H., Septiara, S. W., & Maulida, Z. (2023). Pentingnya Evaluasi dalam Proses Pembelajaran dan Akibat Memanipulasinya. MASALIQ, 3(5), 810–823.

Malasai, D 2016. Analisis Pelaksanaan Perencanaan dan Pengadaan Obat di Puskesmas Modayag. Fakultas Kesehatan Masyarakat Universitas Sam Ratulangi Manado. https://ejournalhealth.com/index.php/ikmas/article/view/217

Ma'sum, Noviyanti, A. A., Fhatonah, N., Aminudin, D., & Ulinnuha, N. F. (2024). Gambaran Perencanaan Dan Pengadaan Obat Di Instalasi Farmasi Rsup Dr. Sitanala Tangerang Tahun 2022. Jurnal Farmagazine, 11(2), 10–14.

Mayel, I.M., (2021) Monitoring Ketersediaan Obat Terhadap Pelayanan Kesehatan Masyarakat Di Dinas Kesehatan Kota Lubuklinggau.

Moga PR, Lolo W, Rundengan G. 2022. Evaluasi Perencanaan dan Pengadaan Obat Antibiotik Berdasarkan Metode ABC Indeks Kritis di Instalasi Farmasi Rumah Sakit Robert Wolter Mongisidi Manado. PHARMACON ;11(3):1549-1555.

Nur Farida, A., Priyoherianto, A., & Nenowati. (2023). Pengaruh Stock Opname Setiap Bulan Terhadap Pengendalian Obat Oral Kedaluwarsa Di Logistik Farmasi Rsi Hasanah Muhammadiyah Mojokerto Periode Januari-Maret 2022. Jurnal Farmasi Indonesia | AFAMEDIS, 4(1), 35–40.

Nurmiwiyati & Amelia (2020). Pengaruh ketersediaan obat dan kualitas pelayanan Farmasi terhadap Kepuasan dan Loyalitas pasien rawat jalan (Studi Pada Rumah Sakit Ibu dan Anak PKU Muhammadiyah Cipondoh, Tangerang).

Rahim, A., & Mustafa, H. (2022). "Collaborative Logistics in Supply Chain Management." Journal of Business Logistics, 25(4), 230-246.

Safriantini, D, Ainy, A, Mutahar, R 2011, Analisis Perencanaan dan pengadaan Obat di Puskesmas Pembina Palembang, jurnal Ilmu Kesehatan Masyarakat.

Seto, S. 2004. Manajemen Farmasi. Surabaya: Airlangga University Press.

Sean, W., Indra M., & Harlen, G.(2022). Peramalan Penggunaan Obat Di Puskesmas Hatonduhan Dengan Metode Trend Projection.

Sitorus, R., Manumono, D., & Ambasari, A. (2023). Manajemen Logistik di Perkebunan Kelapa Sawit PT Surya Agrolika Reksa di Desa Beringin Jaya, Kecamatan Singingi Hilir, Kabupaten Kuantan Singingi, Provinsi Riau. Agroforetech, 1(3), 1783–1796.

Sriwijaya, R. A., Azizah, M., & Aprilyani, I. P. (2022). Gambaran Pelayanan Kefarmasian Dan Waktu Tunggu Serta Mengukur Tingkat Kepuasan Pasien Terhadap Pelayanan Kefarmasian Di Apotek Kimia Farma Sumpah Pemuda Dan Apotek Taka. Jurnal Ilmiah Bakti Farmasi, 7(1), 7–16.

Suryanto, R., & Wijaya, T. (2022). "Risk Management in Logistics Operations." International Journal of Risk Management, 15(1), 99-115.

Sulistiyono, H, et al. (2020). Dampak Kebijakan Pengadaan Obat Pada Puskesmas di Jakarta Era Jaminan Kesehatan Nasional. 295-307.

Sutopo, B., et al. (2022). "Strategic Decision Making in Supply Chain Management." Journal of Strategic Management, 29(2), 160-175.

Syavardie, Y., & Yolanda, E. (2022). Evaluasi Sistem Perencanaan Pengadaan Obat Di Rumah Sakit Islam Ibnu Sina Padang Panjang. 'AFIYAH, 9(2), 57–65.

Tandah, M. R., Ladjama, F. F., & Diana, K. (2024). Analisis Pengendalian Persediaan Obat Dengan Metode Abc (Always Better Control), Eoq (Economic Order Quantity), Dan Rop (Reorder Point) Di Rsud Undata Palu. Jurnal Ilmu Farmasi Dan Farmasi Klinik (JIFFK), 21(2), 225–232.

Utami, S. N., & Lubis, S. (2021). Efektivitas Akreditasi Puskesmas Terhadap Kualitas Puskesmas Medan Helvetia. Jurnal Publik Reform UNDHAR MEDAN, 8, 10–21.

Wahyu Yohanes, 2015. Analisis Faktor yang mempengaruhi Pengelolaan Obat Publik di Instalasi Farmasi Kabupaten, Fakultas Farmasi Universitas Airlangga, Surabaya.

Wahyuni R,; Rohani S,; Oktavianti R, (2019). Hubungan Kepuasan Pengguna Kartu BPJS Terhadap Mutu Pelayanan di Rumah Sakit Daerah Kotabumi Lampung Utara.201-207.

Zahroh, F. L., & Hilmiyati, F. (2024). Indikator Keberhasilan dalam Evaluasi Program Pendidikan. Edu Cendikia: Jurnal Ilmiah Kependidikan, 4(3), 1052–1063.