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Overview of Drug Planning and Procurement Using ABC and Ven Analysis at Salawu Community Health Center

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ABSTRACT

Medicine is a basic component of health services, the disease suffered by patients can be measured by the level of recovery by administering medicine, the Community Health Center as a functional organization has the role of providing health maintenance, prevention, healing and health restoration services. One of the main programs at the community health center is a treatment program, so it is necessary to have sufficient medication available at the community health center. This research was conducted at the Salawu Community Health Center. The aim of this research was to determine the grouping of drugs based on ABC investment analysis, ABC usage analysis and VEN analysis. The research method used was quantitative descriptive using secondary data in the form of LPLPO and supported by primary data from the interview process. The results of this research included drugs in group A based on investment totaling 23 items, group B totaling 31 items and group C 50 items, whereas in the results of the ABC analysis the level of use for group A was 14 items, group B 21 items and group C 69 items. Then the results of the VEN analysis in group V were 13, group E had 64 items and group C had 50 items.

INTRODUCTION

Drug planning is a series of actions undertaken by drug and medical supplies management at a community health center (Puskesmas) to determine the types and quantities of drugs needed to meet the facility's drug needs. Puskesmas plan drug requirements periodically. Due to its technological nature, procurement is one of the most complex logistics management tasks (Karimah, Arso, & Kusumastuti, 2020).

Community Health Center is a first-class health care facility that prioritizes preventive and promotive initiatives to ensure the highest possible public health standards are achieved in the area it serves. In addition, the community health center is responsible for managing medicines. Because drug availability is a prerequisite for health services and a measure of the overall performance of a Community Health Center (Puskesmas). Furthermore, inaccurate drug management controls will negatively impact the Puskesmas' operational costs. Drug management aims to ensure that the required quantity, type, and quality of drugs are always available, without compromising the quality of service provided to individual (Kemenkes, 2019).

Salawu Community Health Center is strategically located next to the provincial highway, in addition to residents of Salawu District, many people from outside the district also seek treatment, so the drug management process must be carried out properly to ensure the availability of drugs that meet needs. Based on the results of interviews with drug managers, at the Salawu Community Health Center there are often empty supplies of drugs and there are also several unused drugs. Therefore, the description of drug planning and procurement at the Salawu Community Health Center using the VEN analysis method and ABC analysis is interesting for researchers.

METHOD

Tool

The Acer laptop used in this study was equipped with an AMD 3020e processor and 1.20 GHz Radeon Graphics, and Microsoft Office software.

Material

The data used in the research consists of secondary data such as drug usage and request sheets (LPLPO), purchase invoices, proof of goods being issued, and primary data obtained from the interview process.

Procedure

This study used a quantitative descriptive method with retrospective data. The analysis was conducted by calculating the number of drugs used in the Salawu Community Health Center Pharmacy Installation from January 2023 to December 2023. Using the ABC method, drug data was grouped based on investment value and usage value. To calculate the usage value, drug items were arranged based on the number of uses from January 2023 to December 2023. Then, the drug data were sorted from highest to lowest (Nurniati, dkk, 2016). The cumulative percentage of all drugs available at the Salawu Community Health Center is calculated based on the percentage of use. Based on the percentage of drugs currently available, these drugs can be classified into ABC groups. The total use value of drugs in group A is 70%, group B is 20%, and group C is 10%. Meanwhile, to determine the investment value, multiply the number of drugs used for each item from January to December 2023 by the purchase price, then cumulatively divide it into three groups: Group A with a percentage of 70%, Group B with 20%, and Group C with 10% (Irma Lusyana Manik, 2019). Meanwhile, VEN grouping is done by providing a drug list sheet to the doctor who then determines

which group the drug belongs to and then summarizes the group by group by the researcher.

RESULTS AND DISCUSSION

Table 1. ABC Investment Analysis Results

No	Group	Amount Item	% Item	Investment Value (Rp)	% Investment
1	A	23	22	124,076,142	69.9
2	B	31	30	36,595,022	20.6
3	C	50	48	16,892,737	9.5
total		**104**	**100**	**177,563,901**	**100%**

Based on the data shown in the table above regarding the results of the ABC investment analysis, the drug group received the highest investment value, with a cost of Rp. 124,076,142. Drug group A consists of 23 drug items, which is 22% of all drugs used at the Salawu Community Health Center in 2023. Because drug group A has a greater investment value than drug category B and drug group C, the drug management at the Community Health Center must pay close attention to controlling drug group A to prevent shortages because drugs in group A are the types of drugs needed for primary patient care and to prevent expired drugs. Therefore, to control the inventory of group A drugs, drug management must conduct strict monitoring and review. This is in accordance with the idea that group A consists of items with small quantities but high investment value, so that stricter inventory control, more accurate recording, and more frequent inspections are required (Fatma, et al., 2022).

From Table 3.1, we can see that Group B reached an investment value of 20.6% of the total investment value or 36,595,022 rupiah for a medium investment value. A total of 31 drug items or 30 percent of all drugs used at the Salawu Community Health Center in 2023 were included in this drug group. Group B drugs have a medium investment value, so to maintain control requires extra caution and the minimum stock as low as possible. Class B drugs require greater attention than class C drugs but not as strict as supervision in group A. Periodically, every three months, physical monitoring should be carried out based on the consumption plan and previous consumption to ensure that class B drugs are always available to avoid hampering the service process (Rismalawati, Lestari, 2015).

Drugs in category C show the lowest investment value, with an investment value of Rp. 16,892,737 representing 9.5% of the total investment, and the number of 50 drug items representing 48% of the total number of drugs. Drugs included in group C have the largest number of drug items but in the process of use are relatively few so the investment value is the lowest, the management of the drug management does not need to check the drugs periodically as is done in groups A and B (Reski, 2016).

Table 2. ABC Analysis Results of Usage

No	Group	Number of items	Number of Users	Percentage of usage
1	A	14	539,673	71.4
2	B	21	152,361	20.1
3	C	69	63,072	8.5
Total			**755,106**	**100**

Based on the table above, we can see the number of drug usage for each group. Group A is the drug group with the most usage but the least number of items. Drugs in group A have a total usage during one period from January to December 2023 of 539,673, covering 71.4% of the total usage. Therefore, drug management must prioritize group A drugs in the drug procurement planning process, in order to ensure the availability of sufficient drugs so that there is no shortage of drug supplies that can result in losses for the Health Center and disrupt patient services. In the usage analysis, class A drugs consist of 14 drug items. Among them, the one with the largest usage value is paracetamol 500 Mg. Category B drugs have a medium frequency of usage, and the number of items is

between groups A and C. To ensure consistent inventory control, category B drugs require special attention. Group B should have less drug stock, but they must purchase more frequently. Working closely with suppliers is the only thing to remember to ensure that orders are fulfilled promptly and there are no stock shortages. Group B is exempt from strict drug laws, but they require regular review. Group C contains a large number of items, 69, but the frequency of use is the lowest, only 63,072 during one year. Drug management may consider reducing future procurement of drugs in this group (Rusli, 2016).

Tabel 3

Table 3. VEN Analysis Results

No	Group	Amount Item	Percentage Item	Investment value	Percentage Investment
1	V	13	12.5%	6,975,465	4%
2	E	64	61.5%	118,910,567	66.9%
3	N	27	26%	51,677,869	29.1%
Total		**104**	**100%**	**177,563,901**	**100%**

From the table above we can see the results of drug grouping based on ABC VEN analysis, There are 13 types of drugs categorized as vital drugs, one of which is Diazepam, drugs classified as vital groups are drugs that can save lives and drugs for basic services if there is an empty stock can increase the risk of death to patients, the supply of drugs in this category must be controlled so as not to experience empty and also excess stock because it is feared that it will not be used. The next category of drugs is Essential, there are 64 items included in this category, drugs in this group are drugs used for basic services in health centers in outpatient and inpatient care, one example included in this category is Antibiotic drugs, essential category drugs must always be available to ensure maximum service. For the Non-essential category of drugs, there are 27 drug items, drugs in this category are drugs that are used as pharmaceutical services in community health centers, there is no need to worry about their emptiness because it will not affect the service process, drugs in this group can be reduced in the procurement planning process if available funds are limited (Reddy, 2008).

CONCLUSIONS AND RECOMMENDATIONS

The results of the ABC analysis of drug investment in group A amounted to 23 items with an investment value of Rp 124,076,142 or 69.9% of the total investment value, group B 31 items with an investment value of Rp 36,595,022 covering 20.6% of the investment value, and for group C amounted to 50 items with an investment value of Rp 6,892,737. The results of the ABC analysis of usage in the group contained 14 items with a total usage of 539,673 covering 71.4%, group B 21 items with a total usage of 152,361 covering 20.1% and group C 69 items with a total usage of 63,072 covering 8.5%. And finally the results of the ABC VEN analysis in group V amounted to 13 items, group E 64 items, and group N 27 items.

BIBLIOGRAPHY

Fatma, Rusli, Dwi Fitrah Wahyuni. 2020. Evaluation of Drug Planning and Procurement at the Lau Community Health Center,

Maros Regency. Journal. Makassar: Alauddin State Islamic University.

Irma, Lusiana, 2019 "Drug Inventory Control with ABC and VEN Analysis at Porsea Regional General Hospital" North Sumatra: Del Institute of Technology, Laguboti.

Karimah, C., Arso, SP, & Kusumastuti, W. (2020). Analysis of Drug Management at the Procurement Stage at Roemani Muhammadiyah Hospital, Semarang. Journal of Public Health, 182-187.

Kementrian Republik Indonesia. 2019. Guidelines for the Management of Pharmaceutical Supplies in Hospital Jakarta: The Directorate General of Pharmaceutical and Medical Device Development of the Ministry of the Republic of Indonesia in collaboration with the Japan International Cooperation Agency.

Nurniati, L., Lestari, H., & Lisnawaty. (2016). Study of Medication Management at Buranga Community Health Center, Wakatobi Regency. Journal of Health Sciences.

Reddy (2008). Hospital Material Management. Journal of Health, 126-143.

Reski, V., Sakka, A., & Ismail, CS (2016). Analysis of Drug Planning Based on the ABC Critical Index Method at Kandai Community Health Center.

Rismalawati, & Lestari, H. (2015). Study of Medication Management at Lawa Community Health Center, Mina Regency. Journal of Health.

Rusli. 2016. Hospital and Clinical Pharmacy. Jakarta: Ministry of Health of the Republic of Indonesia, Center for Health Human Resources Education, Agency for Health Human Resources Development and Empowerment.

Satibi. 2016. Drug Management in Hospitals. Jogjakarta: Gadjah Mada University Press.