

INVENTORY CONTROL OF MORNING CREAM THROUGH THE METHOD OF ACTIVITY BASED COSTING, ECONOMIC ORDER QUANTITY, AND REORDER POINT AT dr. HAS SKIN CARE CLINIC PHARMACY LAMONGAN

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ABSTRACT

The imbalance in demand and availability of products causes obstacles in service. It is necessary to conduct morning cream inventory control studies through the method of Activity Based Costing (ABC), Economic Order Quantity (EOQ), and Reorder Point (ROP) methods at dr. Has Skin Care clinic pharmacy. The method used is ABC Analysis with EOQ and ROP calculations to determine the optimum number of orders and the ideal ordering time. Through ABC analysis, there are 7 types of morning creams that need to be prioritized. Based on the EOQ method the optimum amount of ordering 7 types of morning cream products varies from 1-8 items. Based on the ROP method, the reorder point is obtained which varies from 1-7 items.

Keywords: ABC Analysis, Morning Cream Products, EOQ, Inventory Control, ROP, Pharmacy.

INTRODUCTION

The development of the business world in Indonesia causes companies to have to compete in a healthy manner so that their existence continues to survive in their business. This business competition is also felt by companies engaged in trade and manufacturing. In order to keep the condition of the company good in competing in the business world, the company is required to always be responsive in providing the needs of its customers, namely, providing complete and quality goods, satisfying services and security, and affordable prices.

One of the most important efforts that must be done by companies engaged in the sale of merchandise and manufacturing is to ensure and pay attention to merchandise inventory, and merchandise purchasing for sale. So in this case, the company must be able to analyze and make strategic policies in managing inventory. Companies must have a certain time that is scheduled in ordering supplies, in order to have sufficient inventory and not run out of merchandise so that they are able to meet consumer needs.

Habits that often occur in inventory control are lack of inventory (out of stock) or excess inventory (over of stock). If there is a shortage of raw materials, it will hamper the company's service to consumers, while excess inventory will cause large inventory costs and can reduce the quality of a merchandise. In reality, companies often experience weaknesses in the management of merchandise, namely the absence of a plan when re-ordering and the absence of a policy to store safety supplies, and a schedule for re-ordering merchandise.

Dr. Has Skin Care Clinic is one form of small businesses in which there is a system and supply of merchandise in the form of cosmetics and services in the field of beauty. Every year the clinic experiences an increase in the number of patients. During its 4 years of establishment, the clinic experienced an increase in the number of patients each year by 34% (General Manager of Dr. Has Skin Care Clinic, 23 April 2016). In the annual average report on the number of patients, it can be seen that the sales of products and medicines are available, so it is necessary to pay attention to inventory control which in the clinic has not been a good control system reservations, namely, the Economic Order Quantity (EOQ) method and the Reorder Point (ROP) method to minimize the obstacles that occur during service and from this the author tries to explore some issues, among others, the implementation of morning cream inventory control at the dr. Has Skin Care and control of morning cream supplies through the calculation of the Economic Order Quantity (EOQ) and reorder point (ROP), especially for morning creams in group A through ABC Analysis at the Dr. Has Skin Care Clinic Pharmacy.

ABC ANALYSIS METHOD

In determining its policy, the company classifies it according to the types of materials used with the ABC separation model (ABC Classification). ABC analysis divides inventory into three classes based on inventory value or volume. The criteria for ABC analysis are as follows:

1. Class A: Inventories that have a high annual rupiah volume value. Inventories which belong to this class require high attention in

- their procurement because they have a high cost and intensive inspection.
2. Class B: Inventory with medium annual rupiah volume value. In this class moderate inventory control techniques are needed.
 3. Class C: Inventories with a low annual volume of rupiah are only around 10% of the total inventory value. In this class simple inventory control techniques are needed, checks are carried out once in a while.

Drug Procurement at dr. Has Skin Care Clinic

The procurement system for drugs used is getting better, according to the General Manager of dr. Has Skin Care who has been working since the clinic was founded. Recording used previously is by manual and reporting which is also still very simple. Whereas according to the general cashier, physical records are carried out every week and reporting is done once a month. To order products and medicines that run out, every time the calculated stock is depleted or even runs out of stock, which causes some patients to return when the product or medicine they want to buy is available.

The way to determine product and drug needs is seen from how many patients return to buy the same product or feel compatible with the product. Or also called purchase planning based on the level of sales, namely slowmoving and fast moving on products and medicines available in the clinic pharmacy. The following are the procedures for procuring products and medicines at the dr. Has Skin Care Clinic Pharmacy:

- a. Record the remaining stock every week and ensure that every available stock is sufficient for one month's needs.
- b. Record products and medicines that have arrived.
- c. Create a stock card that can be used to monitor the incoming and outgoing stock of products and drugs.
- d. Report thinning stocks and ask the pharmacist to write a booking note to be submitted to the detailer.
- e. Request approval from the general manager of the order note that has been made by the pharmacist.
- f. Then the order note is given to the detailer or call directly to the distributor if the company in question does not have a detailer or sales.

In the procedure above it is stated that the pharmacists only get the part to write the order note, because in its supervision, the general cashier has done it himself. This system has been running before

the pharmacist is employed in the clinic. A new pharmacist is hired because the clinic needs them as a requirement to issue a clinic establishment permit.

Morning Cream Supplies at the Clinical Pharmacy

Based on the data obtained by the author during interviews with the general cashier and reports on the inventory of morning cream products from May to July 2016. It was found that the total number of morning cream types in the pharmacy was around 15 items, consisting of 4 active morning cream products and the rest is a morning cream product that is less actively sold.

According to the results of interviews with the general cashier in more detail about the control system used in regulating the products and medicines available in the pharmacy, the general manager stated that the control system used was System Inventory. Control is carried out through stock taking conducted every month, stock cards, and seeing expired dates on every morning cream product, and inventory system. And the informant added inventory control carried out by monitoring fast moving and slow moving morning cream products.

Regarding the recording system used, they utilize a stock card that has been prepared with simple tables and they also record the entry of morning cream products every day on books that have been provided by the general cashier.

The inventory system meant here is recording all of the morning cream products through a computer. Every morning cream products that come in are input into the inventory system, how many morning cream products are received according to the name PBF (Pharmaceutical Large Companies), and the price of each item. Morning cream products that come out are also automatically recorded in the inventory system when employees who get a turn to keep the pharmacy serving patients who buy morning cream products, by inputting the item name, and the number of items purchased by patients. This inventory system will automatically reduce the amount of stock in the pharmacy, so inventory control can be carried out by looking at the number of available stock items as well as thinning stock.

In addition, inventory control using a stock reporting system every month. From the report it can be seen from the number of sales of morning cream products for one month, according to the patient's request, the need for immovable morning cream products, and the expiration and packaging of each item.

Grouping Morning Cream Based on ABC Analysis

ABC Sales Analysis

Grouping morning cream products through ABC Analysis is one of the scientific methods for applying policies that are relevant to the control of morning cream product inventories. This analysis is one of the controls by grouping and sorting items. It is an application of the theory known as the Pareto Principle. This analysis method is used to classify morning creams based on the number of uses, this group consists of the largest sales with a proportion of 70%, medium sales with a proportion of 20%, and low sales with a proportion of 10%. Before doing the classification of morning cream products grouping is done based on sales value. Then, the data used is the morning cream sales data during the period from May to July 2016 which are arranged sequentially starting from the highest number of sales to the lowest number of sales. The cumulative results based on groups of proportions compiled by the authors are as follows:

- 1) Group A with a percentage of 70%.
- 2) Group B with a percentage of 20%.
- 3) Group C with a percentage of 10%.

The steps used in carrying out this method are:

- 1) Calculate the number of sales for the last 3 months (May until July 2016) for each item.
- 2) Sort the sales value, from the biggest to the smallest, then make a percentage of sales.
- 3) Look for the cumulative value of sales by summing the value of sales that have been ranked.
- 4) Classify each item based on percentage values.

The results of the morning cream grouping based on ABC sales analysis can be seen in the following table:

Table 3.2
Results of ABC Analysis of Morning Cream Based on ABC Sales Analysis

Group	Total Item	Total Item (%)	Item Sales	Item Sales (%)
A	4	26,67%	382	71,53%
B	6	40%	116	21,7%
C	5	33,33%	36	6,7%
Total	15	100%	534	100%

Source: Processed Secondary Data (2016)

From the results of ABC analysis presented in table 3.2, that morning cream in group A (fast

moving) with the number of 4 items or 26.67% of the number of 15 types of morning cream and is the morning cream product most requested by patients by 382 item or 71.53% of total sales for 3 months.

Then for morning cream group B (moderate) or medium sales with a number of 6 items or 40% of the number of types of morning cream available and sales of 116 items or 21.7% of total sales. For morning cream class C (slow moving) or the sale is slow with the number of 4 items or 33.33% of the number of types of morning cream and sales are only 36 items or 6.7% of total sales. Group C morning cream is the type of product that is most rarely desired by patients.

The following is the morning cream table from group A based on ABC sales analysis:

- 1) Group A is the morning cream product with the highest sales level, by 382 or 71.53% of total sales with 4 product items or 26.67% of the 15 items available. This can be seen in table 3.3.

Table 3.3
Group A Morning Cream Based on ABC Sales Analysis

No	Item Name	Sales	Sales (%)
1	Suncare Daily Protection	216	40,43%
2	Sunblock Double Action N	80	15%
3	Acanthe Sunscreen Cream	49	9,2%
4	Sunscreen Acne	37	6,9%
Total		382	71,53%

Source: Processed Secondary Data (2016)

- 2) Group B is a morning cream group with moderate sales of 116 or 21.8% of total sales with a total of 6 product items or 40% of the 15 items available. This can be seen in table 3.4 below

Table 3.4
Group B Morning Cream Based on ABC Sales Analysis

No	Item Name	Sales	Sales (%)
1	BB Cream Immortal	35	6,6%
2	Acne Daily Care	20	3,7%
3	BB Cream Kitoderm	17	3,2%
4	AV Foundation	16	3%
5	Sunscreen Normal W30	14	2,6%
6	Sunscreen Oily Beige	14	2,6%
Total		116	21,7%

Source: Processed Secondary Data (2016)

- 3) Group C is the morning cream group whose sales are low at 36 or 7.6% of the total sales with 5 product items or 33.33% of the 15 items available. Following is the morning cream table from group C based on ABC sales analysis:

Tabel 3.5
Group C Morning Cream Based on ABC Sales Analysis

No	Item Name	Sales	Sales (%)
1	TS Kid	11	2,06%
2	DD Cream Immortal	9	2%
3	Suncare With Brightener	8	1,5%
4	Acne Day Cream	4	1%
5	Suncare For Oily Skin	4	1%
Total		36	7,6%

Source: Processed Secondary Data (2016)

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