

CHAPTER VI

CONCLUSIONS

This chapter contains several conclusions and suggestions obtained based on the results of the research conducted.

6.1 Conclusions

Based on the objective and results of the research, several conclusions were obtained as follows:

1. There are 228 outpatient medicines in the Universitas Andalas Hospital Pharmaceutical. Medicines are classified by the ABC-FSN classification. Based on the results of grouping outpatient medicines with the ABC-FSN classification, there are 46 medicines classified to group AF, 37 medicines classified to group BF, 46 medicines classified to group CF, 10 medicines classified to group AS, 0 medicines classified to group AN, 21 medicines classified to group BS, 3 medicines classified to group BN, 47 medicines classified to group CS, and 18 medicines classified to group CN.
2. The proposed medicine inventory control is calculated using the continuous review system method. Medicines included in groups A and/or F use the continuous review (s,S) method and the rest use the continuous review (s,Q) method. The proposed inventory in October 2021 – September 2022 has a lower total inventory cost and a higher inventory service level than the actual inventory in October 2021 – September 2022. The total proposed inventory cost in October 2021 – September 2022 is Rp3,658,214,819 with a savings of Rp650,743,612 or 15.10% of the total actual inventory cost in October 2021 – September 2022. The proposed inventory service level in October 2021 – September 2022 is 99.92%, an increase of 6.29% from the actual inventory service level in October 2021 – September 2022.

3. Medicine inventory control is calculated using the continuous review system method. Through inventory control calculations, order lot size (q_0), reorder point (r), maximum inventory (S), and safety stock (ss) are obtained. The order lot size is the size of medicine purchases in one order, reorder point is a point that indicates the time of reordering, maximum inventory is the maximum inventory amount of a medicine in the warehouse where medicines belonging to group A and/or F are ordered with the number of orders made up to the maximum inventory level, and safety stock is an extra inventory that protects against stock shortages due to uncertainties in demand and supply. The order lot size, maximum inventory, reorder point, and safety stock are an economical size because the calculation has considered the profitable trade-off between ordering costs, holding costs, and shortage costs so that the total inventory costs can be kept to a minimum while taking into account the inventory service level. The results of the total inventory cost and inventory service level on the proposed inventory are better than the actual inventory so implementing the proposed inventory will provide better profits for Universitas Andalas Hospital.
4. Medicine inventory control planning is calculated using the continuous review system method. Medicines included in groups A and/or F use the continuous review (s,S) method and the rest use the continuous review (s,Q) method. The total inventory cost for October 2022 – September 2023 is Rp4,535,858,034 with an inventory service level of 99.92%.
5. Inventory control results can be implemented in real conditions because they do not violate storage space restrictions and the inventory control method used is in accordance with inventory classification problems at Universitas Andalas Hospital.
6. The change in cost that has the most effect on the sensitivity analysis of the total cost of inventory in October 2022 – September 2023 is the change in purchasing costs. The decrease of 15% made the total inventory cost decrease by Rp673,163,200 or 14.84% of normal cost and the increase of

15% made the total inventory cost increase by Rp672,822,227 or 14.83% of normal cost.

6.2 Suggestions

There are several suggestions that aim to make similar research better in the future, as follows:

1. Future research should carry out inventory control for other types of medicines.
2. Future research can make SOPs for employees in implementing the proposed inventory control.

