

RINGKASAN

PT Combiphar adalah perusahaan farmasi di Indonesia yang memproduksi serta memasarkan berbagai merek obat-obatan resep dan bebas. Divisi *Quality Control* berperan memberikan pengawasan tahapan produksi dan pengawasan selama proses pemeriksaan laboratorium terhadap suatu jenis obat. Pengawasan suatu jenis obat memenuhi persyaratan mutunya selama peredaran yang ditetapkan. Pemeriksaan laboratorium membutuhkan alat-alat gelas laboratorium untuk menjalankan tugasnya dalam pengawasan jenis obat. Masalah rendahnya ketersediaan alat gelas laboratorium membuat fungsi *Quality Control* tidak efektif.

Persentase ketersediaan enam jenis alat gelas laboratorium yang sangat rendah, berdampak pada *performance* divisi *quality control* yang menurun dan dapat menghambat proses produksi obat. Rata-rata persentase ketersediaan per bulan labu ukur 50mL yaitu 13%, labu ukur 100 mL yaitu 21%, labu erlenmeyer 250 mL yaitu 47%, gelas kimia 50mL yaitu 0%, gelas kimia 100mL yaitu 41%, dan botol timbang yaitu 70%. Jumlah rata-rata ketersediaan alat-alat gelas laboratorium yaitu 32%.

Model probabilistik sederhana, model *continuous review method*, dan model *periodic review method* dapat digunakan untuk mengatasi permasalahan tersebut. masing-masing model *continuous review method*, dan *model periodic review method* memiliki kebijakan *back order* dan *lost sales* dalam penentuan kebijakan inventornya.

Hasil dari penelitian ini adalah kebijakan inventori optimal yang dapat meningkatkan ketersediaan alat gelas di Divisi *Quality Control* dengan menggunakan metode *continuous review method back order*. Persentase ketersediaan labu ukur 50 mL meningkat menjadi 100%, labu ukur 100 mL menjadi 100%, labu erlenmeyer 250 mL yaitu 99%, gelas kimia 50mL menjadi 95%, gelas kimia 100mL menjadi 98%, dan botol timbang menjadi 98%. Jumlah rata-rata ketersediaan alat-alat gelas menjadi 98%.

Kata Kunci: Alat Gelas Laboratorium, *Continuous Review Method*, Kebijakan Inventori, Model Probabilistik Sederhana, *Periodic Review Method*.

SUMMARY

PT Combiphar is a pharmaceutical company in Indonesia which manufactures and markets various brands of prescription and over the counter medicines. Quality Control Division has the role of providing supervision of the stages of production and supervision during the laboratory inspection process of a batch of drugs. Control of a batch of drugs meets their quality requirements during the specified circulation. Laboratory tests require laboratory glassware to carry out their duties in the supervision of drug batches. The problem of the low availability of laboratory glassware makes the Quality Control function ineffective.

The percentage of availability of seven types of laboratory glassware is very low, has an impact on the performance of the quality control division which decreases and can hamper the drug production process. The average percentage of availability per day is 50 mL measuring flask which is 13%, 100 mL measuring flask is 21%, 250 mL erlenmeyer flask is 47%, 50mL beaker is 0%, 100mL beaker is 41% , and the weighing bottle is 70%. The average availability of glassware is 32%.

Simple probabilistic models, continuous review method models, and periodic review method models can be used to overcome these problems. each continuous review method model, and the periodic review method model have a back order and lost sales policy in determining inventory policies

The results of this study are optimal inventory policies that can increase the availability of glassware in the Quality Control Division by using the continuous review method back order method. The percentage of availability of 50 mL volumetric flask increased to 100%, 100 mL volumetric flask to 100%, 250 mL erlenmeyer flask to 99%, 50mL beaker to 95%, 100mL beaker to 98%, and bottles weigh it up to 98%. The average availability of glassware is 98%.

Keywords: *Continuous Review Method, Inventory Policy, Laboratory Glassware, Periodic Review Method, Simple Probabilistic Mode.*