CHATPER I

INTRODUCTION

Hospitals are known as health service providers which offer a wide range of services namely, health promotion, preventions, treatments and rehabilitations to the public. Almost all of these services rely on drugs as an essential element. Drug supply system is a management system that ensures availability of sufficient quantity of high-quality essential drugs, a necessary condition for rational drug use. So it can be said that "excellent drug services are not possibly achievable without efficient drug supply system"

Drug management involves four basic functions: selection, procurement, distribution, and use.

Selection involves reviewing the prevalent health problems, identifying treatments of choice, choosing individual drugs and dosage forms, and deciding which drugs will be available at each level of health care.

Procurement includes quantifying drug requirements, selecting procurement methods, managing tenders, establishing contract terms assuring drug quality, and ensuring adherence to contract terms.

Distribution includes clearing customs, stock control, stores management, and delivery to drug depots and health facilities.

Use includes diagnosing, prescribing, dispensing, and proper consumption by the patient.

The drug management process is truly a cycle with each major function builds on the previous function and leads logically to the next. Selection should be based on actual experience with health needs and drug use, procurement requirement follow from selection decisions, and so forth.

Among all aspects of drug management, inventory management is one of the most difficult to manage and an area that needs effective and efficient managerial operation. It can be considered as the heart of drug supply system. Poor inventory management in drug supply system leads to a waste of financial resources, shortages of essential drugs, and a decrease in the quality of patient care.

Somdejprasungkaraj hospital is a community hospital with 60 beds capacity in Ayutthaya province. Its pharmacy section is in charge of drug management in the hospital. For the fiscal year 2001, there were 321 items of drugs in stock and 132 items of medical supplies. The pharmacy section holds responsibilities in the process of selection, procurement, distribution as well as promotion of rational drug use.

From the experience of working as a pharmacist at Somdejprasungkaraj hospital, it is often found that drug services were often interrupted simply because of a shortage of certain drugs and this was solved at hand by asking the doctor to replace it with other drugs available then in stock, by requesting patients to pick up their medications the next day or by sending the drugs to their places later. The choice of solutions depends on the pharmacist's discretion. It cannot be denied, however, that this problem reflects ineffectiveness of the drug management system that originates from weak inventory management.

Other cases of poor inventory management have also occurred such as having expired drugs in stock and in the service units, drug overstock, delay in sending drugs to requesting services sites, etc.

One factor that contributes to these aforementioned cases comes from poor quality of data on drug stock. Having accurate data will help estimate the needs appropriately. If the data is incorrect or not reliable, it will result in mistakes in stock estimation and will lead to a waste of financial resources, shortage of essential drugs

and a decrease in the quality of patient care. So, the effective inventory management needs to be built on a strong foundation which is accurate and current stock records.

In addition, stock records are a vital source of information on how effective the distribution system is being managed. They provide detailed evidences of how products flow through the system which can be used to identify where problems are occurring so that corrective actions can be taken. It, therefore, can be said that accurate and current stock records are crucial and has a significant effect on the success of drug management.

Stock recordings can be done either manually or computerized. Many supply systems maintain two stock records for each drug item, to improve accuracy and accountability.

In the inventory management system at Somdejprasungkaraj hospital, computer system has been utilized together with a system of stock cards to keep track of stock records. Data in computer system are retrieved from drug delivery and drug requisition forms. These data are printed out into paper documents for copying to stock cards.

Data in computerized stock records and stock cards, in theory, have to always be consistent with products in stock. Such data can be further used in various ways. For instance, the data can assist the procurement section in planning of drug purchase in sufficient number to meet the demand. This will prevent the stock-out problem which affects service quality. In addition, the drugs will not be over stocked otherwise there will be expired drugs which is a waste of hospital budgets. The data are also useful for stock personnel in tracking drug overstock or expired drugs to reduce losses. Moreover, hospital executives can make use of the data in formulating a drug use policy for the hospital and in allocating budgets.

To estimate the extend of incorrect data on drug stock at Somdejprasungkaraj hospital, a stock count was conducted in August 2001. The study revealed that in total 14.8% of drug stock were incorrectly recorded.

The hospital management team and the pharmacy section were aware of the urgency to act upon this problem, especially in the current enthusiastic requirement of hospital accreditation in the society. The pharmacy section of Somdejprasungkaraj hospital has chosen to apply "Continuous Quality Improvement" (CQI) approach to solve the problem and improve its working process. Once the problem is solved and a strong inventory management system is in place with accurate and current stock records, a system to monitor performance would then be set up.

DEFINITION OF TERMS

Stock records refer to the core records in the inventory management system that contain information about suppliers, customers, prices, stock receipts, stock issues, stock losses, and stock balances These data are essential for planning distribution. Stock records can be either manual or computerized.

Physical count / Stock count refers to a comparison between the actual physical stock present and the stock records

Correct records refer to the records that correspond with physical counts

Incorrect records refer to the records that do not correspond with physical counts

Stockout refers to the complete absence of an items that is expected to be on hand.

Service level refers to the percentage of items ordered or requested that are supplied, in the quantity requested, by a warehouse in one delivery.

Stock turnover rate refers to number of time inventory was turned around