## CHAPTER 1

## **INTRODUCTION**

Anybody who gets wrong medicine or inappropriate prescription from doctors is considered to be at an ultimate risk to his or her life. Though, some people may not be affected by getting wrong medication, many people severely suffer from it instead of getting cured. However, such situation is only a tiny part of a big picture of not getting the right medication. Its contexts of this risk go beyond that which is known as Medication Error. The National Coordinating Council for Medication Error and Prevention (NCCMERP) has approved the following as its working definition of medication error.

"A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing; order communication; product labeling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use" The National Coordinating Council for Medication Error Reporting and Prevention (NCCMERP, 1995).

Surprisingly, according to result from various researches, many people are not aware of medication error. Each year, figures show that a large number of patients suffer from the result of medication error. For instance, was the information reported on the Internet (www.medscape.com). The Institute for Healthcare Improvement (IHI), non-profit organization in Boston, which has conducted a study during 1996-1997, found that there were 770,000-2,000,000 patients suffering from medication error in hospitals each year in the US. This illustrates that vast study and development in the area of healthcare profession should be carried out genuinely to find solutions to medication error.

As the world is moving into the so-called globalization era, the exchange of information respects neither time nor borders. In addition, the strain resulted from an increasing demand in patient rights worldwide has triggered the immediate obligation, for in both government and private sectors, to improve the quality of healthcare services. This greatly affects the features of healthcare services. Such improvement is promisingly expected to be an essence of healthcare profession and its outcomes must satisfy patients as well as be complied with concerned international standards. For instance, medication error is one of the most serious issues today because it means to put patients' life at risk as well as risk to face high cost of patients' compensation. Thus, it is necessary for every health center to realize the impacts of medication error. Also they should genuinely improve the management system in their organizations to effectively avoid and minimize the impacts of the above issue.

Recently, however, healthcare organizations has not ignored or underestimated the impacts of the problem. Almost all healthcare organization have continuously tried to solve the problem because it has caused severe effects for both health care staff and patients as well as to the reputation of organizations. Nevertheless, the result from the effort has remained a failure. The main reason for this is the problem solving approach or methods have still bound by the traditional management system. This existing system is still a long and centralized batch-processing-like management, which is designed and controlled by superiors of each sector. Moreover, when any problem arises, the causes and solutions are mostly believed to be at human resources instead of management system. For example, when an error occurs, most organizations often look for someone who was in charge and they will often penalize and/or replace that person with another person. This traditional style of problem solving influences the staff in such organization to report in the way of finding someone to punish instead of looking at the defection from management system. Consequently, the organization may suffer from finding applicable and sustainable solutions because information and specific details about the error are difficult to discover. If looking at the positive aspect of the existing management system, it has evoked the awareness in such organizations to be more opened to accept new, more robust and innovative ideas to improve the quality of existing management systems.

One of the most well-know approaches today is Continuous Quality Improvement (CQI). It has been accepted as one of the most effective tool for sustainable quality improvement as it propels everyone in all sectors to equally involve to their works as a whole. The concept of CQI is the development process that

promoted teamwork as a core system of an organization, while senior executives act as driving force to continuously improve quality of outcomes. There are effective tools used in each process and, most importantly, everyone is equally important and has potential capability to accomplish given assignments if right opportunity is given. The process of problem solving has to be concentrated on the structure of management system, rather than the imperfection of individuals. The system will create the perception of self-importance, awareness, dedication and coordination among all concerns in organization. In addition, it will lead to responsibility in finding solutions for the existing problems as well as maintaining the existing standard to better sustainable solutions. Today, therefore, a number of organizations, including healthcare, are conducting study and research aiming to develop and make use of the CQI system in various sectors in their organizations. To be more practical in applying CQI to healthcare organizations, the Health System Research Department was the pioneer to conduct experiment on the CQI system in many large size hospitals. The results obtaining from those experiments have shown that there are more supportive factors and obstacles, which will either lead to success or failure, needed to be clarified. Thus extensive study on CQI has to be continuously conducted.

From extensive review of information, the new idea of CQI has inspired Banprak Hospital, a 10-bed-community hospital, whose the principles are concentrated on human resources and teamwork-oriented approach to improve the services. The hospital is currently led by a team of executives that consists of seniors who are dedicated, supportive and highly aware of service improvement. They have strong technical background and service competence to satisfy their customers. The hospital

itself will step forward to be classified in a standard, so-called Hospital Accreditation, in the near future. This is the reason why the hospital has chosen to implement CQI to solve problems and to improve quality of its services. To put CQI to work, firstly, all the 11 nurses in the IP Department (Inpatient Department) performed brainstorming in order to find out the problems and their causes. Upon the completion of brainstorming process, everyone agreed that the medication error was considered as the most critical problem. In the IP Department, a Medical nurse was to provide patients medicines in accordance with doctor's prescriptions. However, before medicines get to patients, the process contains many steps, namely ordering, delivery, preparation, proper storage and supply. There is another nurse to takeover the duty and the process continued for 24 hours a day. As it can be seen, to convey information is very complicated and each task can be confusing. Therefor, medication error can easily take place.

The study of implementing CQI is to minimize the risk of medication error in the Banprak Hospital. It is an action research experimenting model for development of system in a hospital in order to examine its outcomes and the effectiveness of processes. What had been learnt from this study would be used as basis of development strategy in Banprak as well as applying of other hospitals or to health care survive reform throughout the country. The system is expected to contribute to the improvement of quality and services of organization, and to which is our ultimate goal in health care survive.