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*Review article***Comparative analysis of pharmaceutical care and  
traditional dispensing role of pharmacy****Phantipa Sakthong**

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**Abstract:**

Pharmaceutical care is a new professional practice that can give an opportunity to pharmacists to prove themselves as a real health care profession. Pharmaceutical care practitioners are concerned with the outcomes of their services on patients' life and not merely with the act of providing services. They work with other health care professionals to ensure that therapeutic goals are achieved and that drug-related problems are identified, resolved and prevented. Therapeutic relationship with patients is required to meet their drugs-related needs. To accept and implement pharmaceutical care, pharmacists must first change their product-or service-focus to patient-focus. The traditional dispensing role of pharmacy cannot guarantee the survival of the pharmacy profession. Providing pharmaceutical care is essential.

**Keywords:** Dispensing pharmacy; Pharmaceutical care; Pharmacy profession; Pharmacy practice; Patient care

## Introduction

To survive in health care systems, pharmacy profession has always adjusted itself. Pharmacists' role has changed from compounding to dispensing, clinical pharmacy services, and eventually pharmaceutical care. Why should pharmacists provide pharmaceutical care? Unlike other health care professionals such as medicine, dentistry, and nursing, traditional dispensing role of pharmacy is not recognized as crucial to society. To be accepted by the society, pharmacy profession must prove that it can be beneficial for patients and have a positive impact on patient health outcomes. Providing pharmaceutical care is a better way to answer the question of the society about the value of pharmacy profession.

Many countries have the problem of rising health care costs. Studies have shown that drug-related problems could cause additional health care expenses [1, 2]. Johnson and Bootman have developed a model of drug-related morbidity and mortality to estimate health care costs associated with unresolved or unrecognized drug-related problems in the U.S. ambulatory care population [2]. The estimate of the annual cost of drug-related morbidity and mortality in ambulatory care settings was \$76.6 billion. The provision of pharmaceutical care in all ambulatory care pharmacy settings would reduce the occurrence of negative therapeutic outcomes by 53-63% and avoid \$45.6 billion in direct health care costs. One might consider this to be the cost of preventable drug-related morbidity and mortality. Therefore, something must be done to control both suffering and expenditure associated with the drug-related problems. Pharmaceutical care role of pharmacy can play an important role to manage a patient's drug therapy to improve patient outcomes in terms of clinical, economic and humanistic outcomes.

However, there were a number of barriers to provide pharmaceutical care [3]. One of the most important barriers was lack of understanding of pharmaceutical care practice and of difference between traditional dispensing role of pharmacy and new role

of pharmaceutical care. It is essential for pharmacists to understand the concept of new practice before they adopt it. Thus, this paper was aimed to compare between the traditional and new roles of pharmacy. Challenges of provision of pharmaceutical care were also described after the comparison.

## Comparison of pharmaceutical care and traditional dispensing role of pharmacy

What is pharmaceutical care role of pharmacy? Strand has defined that pharmaceutical care is "a practice in which the practitioner takes responsibility for a patient's drug-related needs, and is held accountable for this commitment [4]." By this definition, pharmaceutical care can be viewed as a professional practice, like those of medicine, dentistry, and nursing, where the practitioner is responsible for satisfying unique health care needs of a patient. Although these professions address unique health care needs, all of them have a philosophy of practice, a patient care process, and a practice management system [5].

According to the philosophy of pharmaceutical care, the pharmacist's essential responsibility is to contribute to meeting society's need for appropriate, effective, safe and convenient drug therapy. The problems of drug-related morbidity and mortality leading to a unique social need require pharmaceutical care role of pharmacy. With traditional dispensing role of pharmacy, the pharmacist is only responsible for putting the right product to the right patient. The traditional dispensing role requires only knowledge of drug products and drug delivery system. There is no direct therapeutic relationship with patients or patient-centered approach in this role to fulfill this unique social need. With pharmaceutical care approach, the focus moves from products to patients. To meet societal need, the pharmacist has to consider the patient as a whole individual whose health care and drug-related needs specifically are the primary concern [6].

In addition, with the traditional dispensing service, the patient has to do as instructed by the pharmacist.

Conversely, with pharmaceutical care approach, the patient is considered as an active partner in care planning and as the ultimate decision maker. Pharmaceutical care creates a bond, therapeutic relationship, between the two parties: the patient and the pharmacist [7]. The patient gives authority to the pharmacist and the pharmacist promises to grant competence and commitment to the patient. By this commitment, certain responsibilities are recognized, assumed, and accounted for both the pharmacist and the patient. The pharmacist has to 1) assess the patient's needs and identify drug therapy problems, 2) set therapeutic goals and resolve, prevent such drug therapy problems, 3) follow up for evaluation to determine the patient's outcomes in terms of benefits and risks. For the patient, he or she has to provide accurate and complete information to the pharmacist and play an active role to set goals and adhere to the plan. These roles of the pharmacist and the patient can not be seen in the traditional dispensing service.

Moreover, to provide pharmaceutical care practice successfully, the pharmacist must be able to incorporate themselves into health care team and communicate with other health care providers and patients. Hepler and Strand stated that "Pharmaceutical care, as a cooperative activity, would not detract from the other drug use process. It would in fact add to their effectiveness by improving the quality of patient care [8]." In the traditional dispensing role of pharmacy, pharmacists have their own world. They have rarely contacted other health professions in a real clinical setting. Moreover, they have their own language or vocabulary which is not understood by other health care professionals [5]. Therefore, it is quite difficult for pharmacists to satisfy the patient's drug-related needs if they still play a traditional dispensing role.

With pharmaceutical care approach, the pharmacist requires knowledge concerning the patient, drug, and disease and skills necessary to identify drug-related needs of a patient [7]. The pharmacist has to gather information and integrate all information about the patient with the knowledge, skills, and experience.

Furthermore, while health care professionals document their care provided to the patients, traditional pharmacy practitioners never do such document. In pharmaceutical care practice, the pharmacist has to document what he or she provides for a patient in terms of assessing needs, identifying, preventing, solving drug-related problems, and evaluating the patient's outcomes. With the traditional dispensing role of pharmacy, the pharmacist only keeps records to meet legal requirement regarding the drug product.

Another issue regarding the difference between traditional dispensing and pharmaceutical care role of pharmacy is the authority in its own practice. Penna described that "in the philosophy of pharmaceutical care, pharmacists serve patients in order to improve patient outcomes; they take credit when outcomes are positive and accept blame when the result is negative [9]." Pharmacists provide their care to patients directly and not through another authority although they care patients in cooperation with physicians. In contrast, traditional dispensing services are provided at the request or order of prescribers.

The last issue concerning pharmaceutical care role of pharmacy is survival in business. The business of pharmaceutical care is service (people) business which focuses on the patient [5]. The success of pharmaceutical care practice is measured as patient outcomes. Thus, if the pharmacists can prove that they can improve patient outcomes, they should be reimbursed for their "cognitive" services. On the contrary, the traditional dispensing service is generally paid by health care purchasers for purchasing and dispensing of the drug. It focuses on product business in which inventory generates revenue. No patient outcome improvement is evident. Consequently, in this business world, reimbursement is impossible for the "non-cognitive" traditional dispensing role of pharmacy.

In conclusion, the traditional dispensing role of pharmacy is totally different from that of pharmaceutical care regarding social need, responsibilities, relationship with patients and other health care professionals, authority of its own profession, and acceptance as a health care

professional. The appropriate drug therapy, achieved by pharmaceutical care not the traditional dispensing role, will lead to meeting drug-related needs of patients. Pharmaceutical care role needs the new concept or understanding of pharmacists concerning their responsibilities on drug therapy of patients. It also needs a new direct-interaction with both patients and other health practitioners and even new knowledge. Traditional dispensing role denies the direct responsibilities on patient outcomes of drug therapy. Pharmaceutical care practice will carry out a benefit regarding appropriate, safe, and cost-effective drug therapy to the patients, and eventually a lower drug-related morbidity and mortality in society. Finally, this benefit will make pharmacy profession a “real” health care profession.

### **Challenges of pharmacists for provision of pharmaceutical care**

Pharmaceutical care has been accepted and adopted across countries [10]. Barriers related to providing pharmaceutical care reported by community pharmacists around the world included a lack of funds, difficulty in accessing patient’s clinical and laboratory data, lack of clinical knowledge and motivation, lack of time and a private counseling area, little financial incentive, and low expectation of the pharmacy profession [11-13]. For Thailand, even though the national Pharmacy Council has declared “pharmaceutical care as the ultimate goal of professional achievement” since 1994, it is in its infancy [14]. For example, only eight hospitals in Thailand had provided comprehensive pharmaceutical care by 2002. Ngorsuraches and Li reported that most important problems to the provision of pharmaceutical care perceived by Thai hospital and community pharmacists were lack of therapeutic knowledge and clinical problem solving skills, lack of role model of pharmaceutical care providers, and limited data on the proven value of providing pharmaceutical care [15]. Other perceived barriers included lack of time, lack of confidence, inaccessibility to interact with other health care providers, and inconvenient access to patient’s medical information.

The pharmacists’ reasons of not being able to implement pharmaceutical care services do not surprise me because they were not prepared by their pharmacy faculty to play this new role of pharmacy. To produce a practitioner who has the skills and knowledge to provide pharmaceutical care, the main focus of the pharmacy curriculum must be patient-centered practice. Pharmaceutical care is not just a class in the curriculum. Often, when pharmacy faculties negotiate their own course content, producing pharmaceutical care practitioners is secondary to personal and research interests. The purpose of the core courses and laboratories should be to prepare the students with the knowledge (problem-based) and skills they need to provide patient care. Courses should be taught with the methods that make students develop critical thinking, decision making, and communication skills. In addition, characteristics of therapeutic relationship including respect for patients, trust, cooperation with other health care providers, empathy, sensitivity, caring and responsibility for interventions need to be modeled and reinforced continually by faculty.

To prepare pharmaceutical care providers as described above, the faculty must first understand the concept of patient care or pharmaceutical care. A number of faculty members still misunderstand that pharmaceutical care occurs only in hospitals. Pharmaceutical care practice is not about a physical site. It can happen at wherever people live such as home, drug store, or a community. Moreover, they are confused that pharmaceutical care practice is the same as clinical pharmacy services including drug information services, drug counseling, drug use reviews, adverse drug reaction monitoring, pharmacokinetic services. In fact, these clinical pharmacy services are tools that can help in providing pharmaceutical care services. Understanding the pharmaceutical care practice is time-consuming and challenging but crucial. Preparing personnel as well as accreditation of practice sites are also essential.

One more thing that should be emphasized is that pharmaceutical care is not actually about the pharmacist,

but about the patient. It is about care for the individual patient to provide effective, safe, and convenient drug therapy, no matter who provides it. Therefore, physicians, nurses, or other health care providers can do it, if pharmacists do not take this opportunity.

Pharmacists always have an excuse for not providing pharmaceutical care because of limited time and inadequate pharmacists. Actually, they can use pharmacy technicians to do their traditional jobs including checking prescriptions so that they can move to provide patient care (i.e. talking more with patients about their medication use). In addition, the health care system can play an important role to force pharmacists to provide pharmaceutical care. For example, pharmacists' output should be assessed by the number of patients they can identify, solve and prevent the drug-related problems instead of the number of prescriptions they refill or dispense. To be financial incentive, the pharmacists' salary should also be based on the output of the number of patients they provide care.

To implement a new pharmaceutical care practice, pharmacists should not apply the assumptions of the dispensing paradigm to the new practice. They should try to play the new pharmaceutical care role before it is mandatory for all of us. Otherwise, we will never have a chance to do it.

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