

# Introducing Theories of Patient-Focused Care in Pharmaceutical Education<sup>1</sup>

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Patient focus is an inherent component of the definition of pharmaceutical care. The objectives of this paper are to: (i) illustrate how the social and administrative sciences support the notion that patients' perceptions should define the practice of pharmacy, and (ii) describe how patient perceptions gathered by social and administrative researchers can be used in problem-solving exercises for pharmacy students. We are told that both the content and methods of pharmacy teaching must be revised to achieve the vision of pharmaceutical care. Case studies assigned to small groups are one method advocated for teaching students to balance scarce resources, acquire relevant decision inputs, and develop skills for life long learning. Introducing patient data in the classroom increases the relevance of exercises and helps students internalize the principles of patient oriented practice.

## INTRODUCTION

One hundred years ago pharmacy was a profession driven by the demands and preferences of patients. I make this claim in view of the fact that there were no laws that required a physician's order for the sale or purchase of medicinal substances. The practice of the pharmacist was dependent upon satisfying the needs of the clients who presented themselves in search of advice and treatment.

As the decades of the 20th century passed, the reliance of the pharmacist upon his direct relationship with patients greatly diminished. It was over shadowed by societal concerns about the risks arising from mass production and broad distribution of increasingly potent medicinal agents.

Concern peaked with the sulfanilamide tragedy in the 1930s and resulted in the establishment of a class of drugs that could be dispensed only pursuant to the order of a physician. The orientation of patients and pharmacists thus changed, with both being expected to carry out the therapeutic regimen prescribed by the physician. Pharmacists lost their sense of direct responsibility to patients for medical outcomes because both were acting under the directives of the physician.

Inasmuch as physicians became the preeminent au-

<sup>1</sup> An earlier version of this paper was presented at the Social and Administrative Sciences program titled, "Pharmaceutical Care: The Lost Patient," at the 1995 Annual Meeting of the American Association of Colleges of Pharmacy, Philadelphia PA, July 9, 1995.

thorities on the pharmacological treatment of illness, and modern pharmaceutical industry all but eliminated the need for compounding, the profession of pharmacy eventually found it necessary to grapple with the question of its role in society(1). The clinical pharmacy movement of the early 1970s was an attempt to reprofessionalize pharmacists and redefine their role. However, like their predecessors and patients, clinical pharmacists adopted a role that was more physician focused than patient focused(2). The distinction between patient focus and physician focus is an important one.

There are many pharmacists who believe that they are, and always have been, practicing pharmaceutical care because they are providing services to patients. With all due respect to the valuable services provided to the public by pharmacists, there is a difference between satisfying patients with attentive service and allowing the needs of patients to define the nature and evaluation of those services. The challenge faced by the profession is to develop a patient focus and make the appropriate adjustments in our professional attitudes and behaviors, that is, to adopt a new model of practice. A key question is, if pharmacy practice were driven by patients' expectations and perceptions, would it be pharmaceutical care as defined by Hepler and Strand?(3).

This paper has two objectives. The first is to provide examples of how the patient focus is a component of the marketing discipline and quality management practices. The discussion extends from these examples to the argument that the social and administrative sciences provide a basis for the notion that patient perceptions should define important societal functions like the practice of pharmacy. The second objective is to provide examples of how empirical research data gathered from patients in the course of social and administrative science research, can (and should) be used in problem-solving exercises which help pharmacy students develop and adopt pharmaceutical care as their model of practice.

#### A MARKETING PERSPECTIVE: THE 4 "P"s

There has long been a call for the adoption of a theoretical base for the practice of pharmacy, and several options have been introduced for consideration(4,5). However, there is no discernible consensus about which of these, if any, will prevail. There does seem to be far greater consensus about pharmaceutical care as the mission, and a set of behaviors for pharmacists that are derived from that mission(6,7).

Marketing is one of the social and administrative sciences which could provide support and an appropriate framework for implementing pharmaceutical care in practice. Fundamental principles of marketing that are part of this framework already are being presented to students in a pharmacy management courses across the nation. A brief description of some marketing concepts will help to illustrate how we might apply marketing concepts to change practice.

Marketing has been described as the study of the voluntary exchange of goods or services in a way that is meant to serve the needs of both the parties to the exchange(8). Exchange existed in a primitive form in the Stone Age, although it has become a far more complex process in the present era. Students of marketing learn that despite the complexity, there are four ingredients needed for creating any mutually beneficial exchange relationship. The ingredients are the four "Ps": product, price, promotion and place.

The first "P" is product and it refers to the development of goods and services to meet the needs of prospective customers. The second "P" is price, which is the valuation of the product or service that represents a reasonable sacrifice by one party while providing equitable compensation to the exchange partner. The third "P" is promotion, which essentially is the communication process between exchange partners that creates awareness of the available product and an appreciation of its features and benefits. The fourth "P", place, describes the arrangements for the physical transfer of goods and services as well as the transfer of payment and requisite information.

The principles of successful marketing begin with a determination of the needs of consumers. The product, or service as in the case of pharmaceutical care, is designed specifically to meet those needs. The resulting product or service offering is priced in a way that reflects its value to the consumer and the value added to the raw materials by the producer, in addition to the considerations of cost recovery and the price of alternative products and services. The availability of the product or service and a description of its attributes must be communicated (promoted) to consumers, and the product must be distributed in such a way that it is readily available to them.

In today's medical care settings, clinicians are quick to decide what is best for the patient. Sometimes actions are taken without regard to the patient's condition or preferences. I have a favorite cartoon that I use in the classroom at this point. The picture shows only the hands of the "patient" above the prescription counter, white-knuckled and barely able to hang on. The pharmacist peers down and casually says, "This will be ready in 15 minutes or so." We all laugh, but we still expect patients to come to us, at times and in locations that are convenient for the health care provider. And looking up to that pharmacist from the patient's perspective, it would appear that we have the audacity to charge awfully high prices for services whose benefits are not entirely clear to the person who is paying for them.

In a day and age in which we are concerned about outcomes of health care, an appreciation of the reasons why patients do not achieve desired medical endpoints and a sense of well-being is essential to the development of services to improve those outcomes. The marketing framework holds that consumers or their agents will purchase services if the promised benefits are credible, and they will continue to make purchases if those services reliably deliver benefits that meet their needs and expectations. This scenario sounds a great deal like concept of pharmaceutical care when it is defined as the responsible provision of drug therapy to achieve definite outcomes and improve a patient's quality of life(3).

There is a saying that "When the only tool you have is a hammer, everything begins to look like a nail." My graduate education and research in marketing and consumer behavior may have given me a unique tool, and thereby account for my contention that a consumer, or marketing, focus is perfectly consistent with the model of practice known as pharmaceutical care. You may think that this perspective is singularly bizarre, but I am confident that the practice behaviors that result are consistent with the perspective of my colleagues. The primary discrepancy that arises in my discussions about pharmaceutical care with faculty from other disciplinary backgrounds often is over distinction between consumers and patients. Though we

may not agree on the paradigm, we do agree on best practices(9).

#### A QUALITY PERSPECTIVE: THE 5 "D"s

A second example is presented to illustrate how closely the patient as consumer maps with the patient focus in the social and administrative sciences. Both proponents of the philosophy of Continuous Quality Improvement(CQI) and those who adhere to a more traditional, structure/process/outcome approach to quality, agree that the contemporary definitions of quality are expressed in terms of outcomes important to patients(10). The definition of quality promulgated by the Institute of Medicine(IOM) is often cited: "the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge"(11). In elaborating on this definition, IOM makes it clear that quality care includes involvement of the patient in decisions about their treatment, and consideration of patients' time, privacy, and finances in addition to their clinical status. Lohr has cleverly suggested that quality is concerned with the five outcomes most important to patients, the 5 D's: death, disability, disease, discomfort, and dissatisfaction(12).

The current vernacular of quality control is consistent with the concept of Total Quality Management(TQM) in the manufacturing sector. Berwick and others have led the way in translating the principles of TQM from manufacturing to health care(13). A commentary by Berwick in *The New England Journal of Medicine* in 1991 referred to the approach as Continuous Quality Improvement(CQI), a term that stuck(14). Berwick is an effective spokesman for the CQI movement and in his book, *Curing Health Care*, he articulates the fundamentals of the approach very well(13). He first makes the point that health care is similar to other complex production systems, that is, the work can be framed as a series of processes, each with its own set of customers and suppliers. Regarding the customer-supplier(provider) relationship he says,

Quality Management defines my customer as anyone who depends on me....The multiple customers of a modern hospital include, of course, its patients, but they also include the families and friends of patients, the physicians who use the hospital as a workplace, the hospital's employees, the insurers who pay for care, the institutions that help patients after hospitalization, and the community at large, which sees the hospital as one component of its overall system for maintaining and restoring health. Quality management maintains that good customer-supplier relationships—characterized by long-term commitments, clear communications, and mutual trust—are more likely to improve quality...(14, p. 34).

It probably is not necessary to augment or rephrase this quotation to make the point that being involved in quality management in today's health care system means adopting a(customer)(patient) focus.

Virtually every discipline represented within the social and administrative departments of our colleges is apt to find a model which incorporates the patient perspective. Each of these disciplines generates research data either from local

projects or reported in the peer reviewed literature which is available to teach professional students to think critically from the patient perspective. Some topics and research from various disciplines which come to mind include: client-centered model in sociology(15), principles of paternalism and distributive justice in law(16), health beliefs in patient education and counseling(17), cost utility studies in economics(18), and consumer reaction to drug benefit design in the area of administrative and financial management(19-20).

#### RESEARCH ON THE PATIENT PERSPECTIVE

My research interest is measuring patient perceptions of pharmaceutical goods and services. This area of research is important to the profession and for attaining the vision of pharmaceutical care for two reasons. One reason is marketing related. It is important to know what and how goods and services provided by pharmacists best meet the needs and expectations of our patients. No matter the product or service under consideration, we need to identify questions to be posed to patients in order to pinpoint gaps in existing services. The challenge is to ask the questions that reflect the scope of the service, and to separate improvements that are necessary from those which would be nice, but are not essential, to good outcomes.

For pharmacists interested in improving drug therapy outcomes for their patients while improving the future of the profession, satisfied patients are an important goal. Satisfied consumers are likely to raise the expectation of their friends and acquaintances so that a demand for a generally higher level of professional practice will ensure economic viability(21).

The second reason for measuring patient perceptions of care is to inform quality improvement efforts. That is, patient satisfaction is a valued outcome in its own right(22). It is an outcome that is on par with clinical outcomes as a desired product of the pharmaceutical care process. The framework of the Medical Outcomes Study is one example that clearly shows satisfaction as an outcome along with clinical parameters(22).

Patient satisfaction is an important outcome in practical terms because the evidence from health services research is that satisfied patients are less likely to miss appointments, discontinue treatment, change physicians, drop out of health plans and use out-of-plan resources, and they are more likely to cooperate with care(23). If we can assume that adherence to the advice of health care providers is the best way to achieve good medical outcomes, then patient satisfaction should be an important goal of society, and of the organizations and agencies that pay the bills for that care.

Specific research questions that are important to achieving both marketing and quality improvement goals include:

- What is patient satisfaction? What are patient's expectations? How do patients judge quality?
  - How can the degree of satisfaction or perceived quality be measured?
  - How are these constructs interrelated? And, how are they related to the objectives and outcomes of pharmaceutical care?
  - How can we assess value the of pharmaceutical care to patients, physicians and payers?
  - How can important information about quality and value be communicated to patients, physicians and payers?
- In recent research at the University of Florida, we have

collected data from patients that we hope will both define and evaluate the nature of pharmaceutical care. We have implemented a pharmaceutical care initiative known as Therapeutic Outcomes Monitoring (TOM)(24). At the outset several faculty and graduate students were involved in a project that used in-depth interviews with individuals and groups for the purpose of refining our understanding of the kinds of problems patients face in the drug use process. We found that patients with asthma had at least three major issues. They wanted: (i) more control over their lives; (ii) health practitioners who are empathetic listeners; and (iii) personal attention and individualized advice and recommendations. Ongoing studies suggest that these issues are not exclusive to the domain of persons with asthma, but that they recur in varying degrees in patients with diabetes, cardiovascular problems, and other chronic diseases. Furthermore, they are closely related to the qualities Berwick called essential to quality management: long-term commitments, clear communications, and mutual trust(14).

We are relying in part on patient reports to assess the impact of pharmaceutical care initiatives(25). We have gathered pre-test data by telephone interviews of persons with moderate to severe asthma. Adults complete the MOS-36 and Hyland's Living with Asthma Scale, and they provide ratings of their satisfaction with current care and pharmacist activities they have encountered in the past. Pediatric patients are asked to complete the children's version of the Living with Asthma Scale and a children's version of a satisfaction with pharmaceutical care scale that I devised. Parent interviews follow and they complete the parental burden section of Hyland's instrument as well as rate pharmacist performance and their satisfaction. Tests of the relationships between satisfaction and health related behaviors also are part of the long range plan. Certainly information gathered will suggest improvements to the program and better ways to probe for relevant information in future work.

Research that measures patient perceptions and behaviors will naturally lead to secondary studies to answer the questions:

- How can the benefits of pharmaceutical care be communicated to patients and physicians and others?
- How can we assess the value of pharmaceutical care to patients, physicians and payers in monetary terms?

## TEACHING THE PATIENT PERSPECTIVE

Although the questions I have posed are important to researchers and represent a lifetime of scholarly inquiry for many, they also are questions of importance to future practitioners. Pharmacists may not be able to wait for definitive research results because they need answers to these questions in order to function in practice now(26). So, practitioners must do as they have done in the past when action is required under conditions of uncertainty. They gather the best available evidence and apply their best judgment to reach a decision about how to act. Our students will need to do this, too, as they enter professional practice. Our charge as educators is to help them resolve this dilemma responsibly by incorporating the best available evidence into the solution.

McCombs and colleagues at University of Southern California have documented their recommendations for achieving the vision of pharmacy care as the practice paradigm of the future(27). They place strong emphasis on the

need for curricular reform to achieve the vision, with changes in both the content and the methods by which students are taught. They set three goals for course content: (i) to use clinical knowledge to solve health-related problems on behalf of individual patients while using managerial skills to balance the allocation of scarce resources; (ii) train students in quick retrieval of information needed to treat patients because the knowledge base is overwhelming; and (iii) life-long learning. They offer four implications for teaching methods: (i) material taught in formal course work must focus on theoretical underpinnings of the discipline, not memorization of details; (ii) students must be given sample applications to real-world problems; (iii) students should work in small groups, practicing the application of course materials to clinical problems; and (iv) student must be evaluated on their ability to solve clinically relevant problems. They state, "The traditional management course should be modified to introduce these skills as case studies, much as is done in the business school curriculum." The AACP Committee on Changing the Culture Within our Schools/Colleges of Pharmacy offered similar advice(27).

The case study approach, using empirical data from research studies, is one mechanism I have used to develop knowledge, skills and attitudes in the classroom in a context that students perceive as relevant to their immediate future practice. The ability to evaluate the evidence is cultivated through active practice rather than taking notes in lecture. Problem-solving is enhanced through experience rather than reading about it.

Data collected from the asthma study formed the core of one of the cases that we have used in either the management or quality assurance class in the past two years. The assignment has varied slightly according to the needs of the class. An example of the assignment as given to the students is presented in the appendix. The Exercise on Health Related Quality of Life(QoL) is conducted over a period of three weeks. We first ask each student to complete and score their responses to the MOS-36. They are not required to submit the completed form but in small groups we discuss the questions that were troublesome including those which were not applicable, were hard to answer, or considered intrusive. The students have deduced the potential problems in interpretation and the lack of specificity that comes with using summated scores. With their own experience in mind, the students then review response frequencies of a group of patients who completed the Living with Asthma scale. They are asked to draw some conclusions about the QoL issues that are most salient for this particular group of individuals.

The second phase of the assignment has varied from having students read published qualitative studies on the patient experience, to working in groups of four to review transcriptions of personal interviews we conducted with persons, or parents of children, with asthma. The small group discussions revolve around the nature and outcomes of interpretation possible with both quantitative and qualitative data. In a final phase we have asked the students to design a pharmaceutical care service that would address the needs the patients expressed. They were challenged to separate the essential and the optional activities and to make their suggestions feasible for practice.

This is just one example of exercises that are built upon research data and have been used effectively in several classes. Other exercises incorporate data about the epidemi-

ology of adverse drug reactions, quality performance indicators in long term care facilities, prescription drug use and nonuse among pregnant women covered by Medicaid. In each case the students are asked to understand the data along with its strengths and weaknesses. The students are challenged to reconcile data with pharmacy practice as it is, as it ought to be, and as it might be. They are always polled, either individually or collectively, for conclusions and action steps. Their observations and recommendations are tallied and reported back to the class and occasionally to a relevant external agency. In recent semesters we have sent a summaries of our discussions to the state Medicaid program office, the United States Pharmacopeia and various journal editors and authors. The process engages both the students and the instructor and each learns from the exchange of information.

In summary, the objective of this approach is to incorporate research data into cases that introduce real data and real problems to students in the classroom. The purpose of the approach is to help students learn the principles of social and administrative science in the context in which they will be applied. The overriding goal is graduates who can formulate a personal philosophy of professional practice that is driven by the needs and expectations of patients, and where performance is evaluated in terms of goals and objectives set by the patients they are intended to serve.

*Am. J. Pharm. Educ.*, **61**, 410-14(1997); received 7/16/97.

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## APPENDIX. EXERCISE ON HEALTH RELATED QUALITY OF LIFE

### LEARNING OBJECTIVES

1. Identify social and psychological problems important to patients' understanding and adherence to a therapeutic plan.
2. Consider the responsibility of pharmacists to detect, prevent and resolve socioeconomic, as well as therapeutic problems associated with drug therapy.
3. List strategies to help patients define and achieve appropriate therapeutic outcomes.

### ASSIGNMENT

#### Part I. Health-Related Quality of Life

1. Complete the Medical Outcomes Short Form-36(MOS-36) which is provided. Compute your score. YOU WILL NOT BE ASKED TO TURN IN YOUR INDIVIDUAL ANSWERS.
2. List aspects of the questionnaire that you believe would pose difficulties for patients. For example, are there instances where the instructions or meaning of the question was not clear? Were there questions that may not be applicable to some patient groups, answers that may be considered embarrassing or an intrusion on privacy, etc.?

#### Part II. Disease Specific Quality of Life: Living with Asthma

1. Recently 53 patients from our area were interviewed by telephone and asked to complete the Living with Asthma Form. A copy of the form and the frequency distribution of the responses is attached. List three activities that most affected in this group of asthma patients.
2. Read one of the following articles. Cite at least three similarities or differences between the asthma patients we interviewed and the characterization portrayed in the article. In what ways does the narrative help you to interpret the results of the patient study?
  - a. "Round-table presentations. Defining normative care: perspectives from clinical practice," *Medical Care*, **31**(Suppl 3): MS 29-MS 46(1993).
  - b. Snadden, D., and Brown, J.B., "The experience of asthma," *Soc. Sci. Med.*, **34**, 1351-1361(1992).
3. What activities or services should a pharmacist incorporate in a disease management program for asthma in order to meet the needs of these patients?

The functionalist theory focuses on the ways that universal education serves the needs of society. Functionalists first see education in its manifest role: conveying basic knowledge and skills to the next generation. Durkheim (the founder of functionalist theory) identified the latent role of education as one of socializing people into society's mainstream.Â They focus on how teacher expectations influence student performance, perceptions, and attitudes. Robert Rosenthal and Lenore Jacobson conducted the landmark study for this approach in 1968. First, they examined a group of students with standard IQ tests.