Educational Care 101: Prerequisite for Pharmaceutical Care

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The concept of pharmaceutical care, "the responsible provision of drug therapy for the purpose of achieving outcomes that improve a patient's quality of life," has been embraced by most of the major professional pharmacy organizations (1, 2). In Background Paper I, the AACP Commission to Implement Change in Pharmaceutical Education describes the delivery of pharmaceutical care as the mission of pharmacy (3). Background Paper II, from the same commission, describes the role that pharmacy education must play in achieving pharmaceutical care and establishes curricular guidelines to assure that students acquire a defined body of general and professional knowledge (4). But we must ask ourselves whether pharmacy schools and faculty are adequately prepared to accept the responsibility of preparing future pharmacists to provide pharmaceutical care. The premise of this article is that a fundamental paradigm shift

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must take place in pharmacy education: we must exemplify the care ethic in education if we expect its acceptance in pharmacy practice. In other words, if we are to be successful at teaching pharmaceutical care, we can best do so by providing educational care.

Popovich and Trinca defined educational care as "the establishment of a commitment between the faculty and the student and cooperation with the student and other faculty in designing, implementing and monitoring an educational plan that will produce specific performance based outcomes for the student" (5). In the same way that the mission of pharmacy is the provision of pharmaceutical care, the mission of pharmacy education, indeed all education, must be educational care.

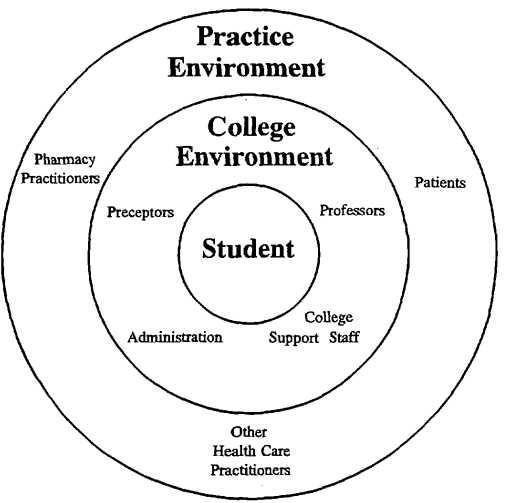
Like pharmaceutical care, the concept of educational care goes beyond dispensing information to include monitoring and, when necessary, intervening to assure optimal educational outcomes for students. Thus, the role of pharmacy educators may be seen as teaching, advising, mentoring, and serving as role models for the purpose of achieving outcomes that improve students' abilities to think critically, solve problems, and make ethical decisions that will ultimately improve patient care.

PROVIDERS OF EDUCATIONAL CARE

Professors are not the only providers of educational care. As shown in Figure 1, the entire college environment, including administrators, support staff, preceptors, and professors, is composed of direct or indirect providers in a student-centered educational care setting. Deans, department heads, and other administrators facilitate educational care by communicating the mission of educational care, assuring a healthy learning environment for students, encouraging feedback to improve educational care, promoting in-service programs to enhance teaching skills, and supporting excellence in teaching through incentives or rewards that are consistent with teaching expectations.

College staff, such as student counselors and librarians, can be direct providers of educational care. Other staff members (e.g., those involved in recruiting, admissions, financial aid, audio-visual equipment, maintenance) are at least indirectly involved through their support roles. The concept of educational care should be speci-

FIGURE 1. Participants in Educational Care



fied as a part of the mission of the college and put into practice by all employees, not just the professors.

The pharmacy practice environment completes the educational care diagram. As stated by Popovich and Trinca, the concept of educational care also extends to practitioners (5). Preceptors, as a subset of pharmacy practitioners, are both beneficiaries and providers of educational care. As role models or mentors, preceptors can be very influential in reaffirming (or refuting) what we teach in the classroom. If students do not see pharmaceutical care being provided in their externship sites,

they may feel that their education was not realistic and may disregard much of what they have experienced. Therefore, the process of selecting and evaluating preceptors who exemplify caring for both patients and externs is as important as the selection and evaluation of faculty members. Colleges of pharmacy should also consider ways to help all practitioners, especially current and prospective preceptors, improve their pharmaceutical care skills.

ELEMENTS OF EDUCATIONAL CARE

How is care provided in the educational setting? Figure 2 provides a partial list of the basic elements of educational care. As discussed below, there are many similarities between the elements of educational care and those of pharmaceutical care.

A caring relationship requires commitment based upon trust, respect, and empathy. In a recent article in the *Annals of Internal Medicine,* Spiro laments physicians' lack of empathy for their patients. He states that medical students start out with the ability to empathize but that they "lose empathy as they learn science and detachment, and hospital residents lose the remainder in the weariness of overwork . . . ." He goes on to state that "If we abuse our [students] with too much work, they will learn to care less for their patients, and too much for themselves" (6). By empathizing with our students, we will demonstrate the importance of empathy for patients.

It is essential that students realize that learning is a partnership between instructor and student. If students are to feel that they are partners in the educational process, they must be aware of the instructor's expectations and should think that outcome goals for courses are realistic. Communication, an important component of care, is a two-way street. The teacher who merely dispenses information is not a good role model for students who are encouraged to go beyond the dispensing role.

The teacher's role, like that of a pharmacist, is to make certain that the information that he or she provides is comprehensible to the recipient. To understand student difficulties, the instructor must be familiar with alternate learning styles and, when appropriate, reinforce learning with written and verbal instruction. It is also important for instructors to provide a framework for students to paint the big

FIGURE 2. Partial List of Basic Elements of Educational Care

Encourage Caring By Example
- Treat students with respect
- Accept responsibility for establishing trust
- Be truthful
- Treat all students fairly
- Maintain confidentiality

Enhance Communication
- Celebrate cross-cultural diversity
- Use appropriate body language
- Learn students' names
- Be familiar with alternate learning styles
- Demonstrate, illustrate and coach
- Reinforce learning with written and verbal instruction
- Check for understanding
- Paint the "big picture"--provide a framework
- Participate in student activities

Remove Physical Barriers
- Do not view the podium as protection from students
- Keep office hours and an open door

Establish a Learning Partnership
- Discuss your expectations
- View students as partners in the learning process
- Establish reasonable outcome goals
- Provide reasonable learning objectives

Change the Image of the Professor
- Move from a professorial model to a coaching model
- Move from content-orientation to a student-orientation

Manage Time Wisely
- Make effective use of classroom time--concepts require more classroom time than content
- Use college support personnel effectively
- Incorporate Educational Care into service, research and teaching activities (e.g., by mentoring undergraduate research, advising organizations, etc.)

Evaluate Efficacy of Intervention
- Expand evaluation beyond test grades
- Provide constructive feedback to students throughout the semester
- Encourage students to provide feedback on teaching effectiveness during the semester--not just at the end

picture. Students are generally more eager to learn when they can conceptualize where the information will be used in the real world.

Wise time management is an essential strategy in the process of achieving educational care. A focus on student outcomes requires more time than a content-based focus. College support personnel can be very effective in diminishing the instructor's workload. Faculty may incorporate educational care by mentoring undergraduate students and by serving as advisors to professional organizations.

THE EDUCATIONAL CARE PROCESS

The process of educational care can best be illustrated by examining it in terms of the process of pharmaceutical care. The traditional approach to patient monitoring and intervention begins with the clinical evaluation of patient status using the familiar SOAP note. Here, subjective evaluation (S) of a patient complaint is followed by objective evaluation (O) of laboratory and diagnostic tests. Together, these evaluations provide information for assessment (A) of patient status and form the basis for subsequent treatment plans (P).

The initial phase (i.e., subjective evaluation) depends upon establishment of a foundation of trust. In education, as in health care, most of the data we interpret is of a subjective nature. Accurate evaluation requires familiarity with the patient's (or student's) background, abilities, and values.

The next step, objective evaluation or examination (e.g., measurement of blood pressure), leads to assessment of patient status (diagnosis of hypertension) and selection of a treatment plan (control of diet and/or initiation of drug therapy). Examinations of students in the classroom should be conducted for the same purpose: to diagnose problems. College examinations, however, are not usually used to diagnose problems, but to rank students. In this case, examinations are used to assess progress before problems have been identified and prior to our intervention. If there is no intervention, then a grade of "D," for example, could mean both "deficient" and "done." In educational care, it is the joint responsibility of teacher and student to diagnose problems and seek resolutions. Of course, there will always be some students who will resist the intervention, just as there are some patients who resist counseling and advice.

In a medical intervention, a treatment plan is designed to achieve a desired outcome, then an appropriate monitoring plan must be designed. When the outcomes of therapeutic interventions do not meet expectations (e.g., blood pressure does not drop), the treatment should be adjusted. Similarly, in education, when outcomes (e.g., examination grades) do not meet expectations, we should consider our options, including the possibility of adjusting our teaching, and not automatically adjust the measurement instrument to get the response we want (i.e., curving grades).

Once a treatment plan has been implemented, success must be evaluated. The success of medical intervention is measured by cure of disease, amelioration of disease symptoms, slowing of the disease process, and prevention of disease (7). Maintenance of a healthy environment and the promotion of health should be included as desired outcomes of intervention. In education, we should also focus upon the promotion of a healthy learning environment in which all participants are shareholders. A good evaluation of the outcomes of our efforts, both in medicine and in education, should provide suggestions for improvement. Because care is a process, we must constantly evaluate the efficacy of our interventions.

The shift in pharmacy from a product-oriented focus to a patient-oriented focus will require pharmacists who demonstrate sympathy, empathy, respect, cultural awareness, responsibility for patient outcomes, and a caring attitude toward patients. A shift from a content-based focus to a student-centered focus in education would seem to mandate similar changes.

BARRIERS TO ACHIEVING THE CARE ETHIC

If pharmaceutical care and educational care are so important, why aren't they being provided on a consistent basis? It is doubtful that pharmacists or educators actually lack a caring attitude. It is more likely that there are obstacles impeding the caring that we would like to provide. Many parallels may be drawn between perceived barriers to achieving a care ethic in pharmacy and barriers to achieving a care ethic in education. A comparison of these barriers is illustrated in Figure 3.

Barriers to care may be categorized as external or internal. Exter-

FIGURE 3. Comparison of Barriers to Providing Pharmaceutical Care and Educational Care

BARRIERS IN PHARMACEUTICAL CARE	BARRIERS IN EDUCATIONAL CARE
External Barriers	
Physical Barriers • Elevated prescription counter • Lack of privacy	Physical Barriers • Elevated podium • Lack of privacy
Insufficient Time • Too many patients; too many prescriptions • Patients do not want to wait • Shortage of pharmacists	Insufficient Time • Too many students; large classrooms • Students want instant feedback • Shortage of teachers (exacerbated by emphasis on research and service activities)
Economic Barriers • Inadequate reimbursement for cognitive services • Third party reimbursement restricted • Care is cost and labor intensive • Care not rewarded as much as productivity	Economic Barriers • Inadequate recognition for teaching excellence and educational care • State appropriations for education restricted • Care is cost and labor intensive • Teaching not rewarded as much as research and grantsmanship

Internal Barriers	
Image of Provider • Pharmacist viewed as dispenser of drugs • Care requires patient focus	Image of Provider • Professor viewed as dispenser of knowledge • Care requires student focus
Lack of Responsibility • Lack of trust inhibits counseling and intervention • Diminished autonomy prevents acceptance of responsibility by patients • Patient outcomes often seen by pharmacist as patient's responsibility	Lack of Responsibility • Lack of trust inhibits diagnosis of problems, intervention, and academic advising • Diminished autonomy prevents acceptance of responsibility by students • Student outcomes often seen by teacher as student's responsibility
Inadequate Communication • Lack of cultural awareness • Pharmacist may seem unapproachable • Pharmacist may not be adequately trained to communicate or counsel • Written instructions (such as auxiliary labels or package inserts) may be misunderstood	Inadequate Communication • Lack of cultural awareness • Professor may seem unapproachable • Professor may not be adequately trained to communicate or teach • Written materials may need to be explained or demonstrated

nal barriers in pharmacy revolve around the economic, political, and social environment, or the physical environment of the practice site itself. For pharmacists, these include pressure to contain costs, increase productivity, provide fast but accurate service, and satisfy employers.

Pharmacists often complain that there are too many prescriptions to be filled and not enough time or incentive to counsel patients. Patients often do not want to wait for prescriptions or do not understand the value of medication information. Similar barriers exist in education. Students, too, want instant feedback from teachers who often have very large classes. Many professors feel an additional pressure to spend time on research and service activities which may divert time from teaching.

There are physical barriers to the provision of care both in the pharmacy and in the classroom. The elevated prescription counter, which places the pharmacist above the patient, and the podium, which places the professor above the student, both inhibit communication. A lack of privacy in the pharmacy often constrains adequate counseling, as does a lack of privacy in the educational community, where professors' offices are often crowded.

Economic constraints may be obstacles to care in pharmacy practice and in education. Pharmacy practitioners find that inadequate reimbursement discourages cognitive services. Care is very labor-intensive and, consequently, expensive. Productivity, as measured by the number of prescriptions filled, has often been rewarded instead of the quality of care afforded to patients. In education, instructors often complain that there is inadequate recognition for teaching excellence and that productivity is often measured in terms of research and grantsmanship, not the care given students through teaching, advising, and mentoring.

Internal barriers are those over which the provider has control. Pharmacists have often viewed themselves as dispensers of a product (i.e., drugs). Likewise, professors have often viewed themselves as dispensers of knowledge. There is an increasing recognition in both pharmacy and education that care requires a focus upon the recipient. To achieve this level of care, the provider must assume responsibility for outcomes.

Assurance of outcomes is very much dependent upon commu-

nication between the provider and the recipient of care. Barriers to communication are numerous and include a lack of cultural awareness, aloofness, lack of empathy, lack of training in counseling and communication, and the absence of trust. Additionally, not everyone communicates effectively in the same way. Just as it is essential for pharmacists to go beyond the auxiliary label or the package insert in ensuring patient understanding and compliance, so must the instructor go beyond written materials in ensuring student understanding and compliance with instructions.

Trust is essential in breaking down internal barriers to establish the level of communication required to provide care. A lack of trust on the part of students and patients inhibits adequate counseling and intervention processes. This situation is exacerbated when the recipient of care does not see himself as a self-determining agent. This diminished autonomy prevents acceptance of responsibility for outcomes by patients or students.

A prerequisite for education (intent on eliminating barriers) is expanding our circle of influence to include students and practitioners in achieving the goal of quality care. The best way to graduate future pharmacists who are well grounded in the professional care ethic is for pharmacy students to see the care ethic modeled by teachers and practitioners. If we expect our graduates to overcome barriers to pharmaceutical care, we should show them by example how this may be achieved.

A care ethic is more easily achieved when one learns it by example. Unfortunately, the role model most of us have experienced and emulated is that of a dispenser of information. Educators who themselves have not been recipients of educational care may find it difficult to change to a student-oriented approach in which the teacher and student share responsibility for educational outcomes.

Although adopting the educational care model may not be easy, we as professors should be willing to reexamine our own approaches to education and make changes where necessary. We can begin by eliminating the internal barriers over which we have control. Together with the other providers of educational care (i.e., college administrators support personnel, and preceptors), we can work to minimize or eliminate the external barriers.

CONCLUSION

It is folly for us as pharmacy educators to encourage students to assume a level of responsibility toward their patients that we do not assume in our dealings with students. The importance of role modeling as a foundation for pharmaceutical care should not be underestimated. The years that a student spends in pharmacy school will contribute to the building of this foundation. If students feel "the joy we have in what we do for them," perhaps they will approach pharmacy practice with a similar enthusiasm (8).

Assumption of responsibility for either quality of life or quality of education inherently involves monitoring, assessment, and intervention on the part of the provider. There will always be identifiable barriers to the care ethic. However, if we instill in our students the value of care and the trust such behavior engenders, we will be providing them with a foundation that will ultimately result in the best possible patient care.

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