

Leading Students to Care: The Use of Clinical Simulations in Ethics

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ABSTRACT. Although there is considerable normative discussion about the importance of care and caring in the pharmacy literature, little empirical data exist about how best to teach students to become caring professionals. Third-year pharmacy students (N = 50) in a required ethics course participated in four clinical simulations involving ethical issues. Although the primary purpose of the project was to explore the impact of clinical simulations on ethical decision-making, a secondary question surfaced: Do clinical simulations teach students about what it means to care for a patient? Since care is a complex phenomenon, it follows that learning how to care requires multiple teaching strategies and various types of assessment. Evidence of student learning such as: transcriptions of clinical simulations, reflective writing on the simulation experience and learning about caring from interactions with standardized patients are included. Finally, organizing questions for further research in teaching and learning about caring behavior in pharmacy education are presented. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2005 by The Haworth Press, Inc. All rights reserved.]

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INTRODUCTION

Pharmaceutical care has become the primary definer of what it means to be a pharmacist and practice pharmacy. Since Hepler and Strand introduced the concept of pharmaceutical care, it has become increasingly apparent that the “care” component of pharmaceutical care is a varied and complex phenomenon (1-2). Pharmacy, like other health professions, has struggled to describe, define, deconstruct, and delineate care and what it means in pharmacy. The pharmacy literature is also replete with thoughtful and convincing arguments regarding the importance of care in pharmacy practice and proposals for teaching students about care and how to care (3-10). However, there is little empirical knowledge of how caring is taught and learned. It seems logical and in line with how faculty members work that the concept of caring should be adequately analyzed in pharmacy before taking action in teaching and learning how to care. The call for an “explicit definition of caring behaviors” is a compelling one (2). For the purposes of this paper, the discussion will be limited to an analysis of caring behaviors by pharmacy students and their understanding and insights into what it means to engage in caring behavior. Caring is defined as “a behavior or set of behaviors that stems from a strong opinion, feeling, concern, or interest in something or someone that contributes to the good, worth, dignity, or comfort of someone” (11).

The focus of this paper is to explore caring behaviors through clinical simulations in an ethics course. The working definition of caring as behavior allows preliminary inquiry into teaching models and methods that shape students into caring pharmacists. The paper begins with a brief explanation of a framework for conducting such a scholarly inquiry into teaching and learning, then provides evidence of student work from three sources: (1) verbatim transcriptions of videotaped clinical simulations with standardized patients (SPs), (2) self-reflective writing on a specific clinical simulation, and (3) summative self-reflection on learning about caring over the course of a semester in a required ethics course. Finally, organizing questions for further research in teaching and learning about caring behaviors in pharmacy education are presented.

CARE IN ACTION

“The scholarship of teaching and learning is not about finding the single best method of teaching for all situations, it is about finding the best method for a particular discipline and a particular instructor in order to achieve a certain kind of learning among students” (12). In order for one to become a more effective teacher, one needs to view what goes on in the classroom (real or virtual) in a different way, that is, viewing teaching practice and evidence of student learning as problems or questions to be investigated, analyzed, represented and debated (13).

From this perspective, student learning is more than a matter of whether they “get it” or not; we assess understanding in multidimensional terms (which is especially apt for a complex phenomenon like care) such as interpretation, application, sensitivity and self-knowledge (14).

So, what are the best methods for pharmacy students to learn to become caring professionals? Since caring behavior is best understood “in action,” clinical simulations are one way for students to practice what they will eventually have to do with and for real patients in clinical settings. Although the following quote refers to “compassion” rather than care and written several years before the bulk of the pharmacy literature on care, the author’s suggestions for teaching strategies is relevant to the present discussion. “To produce compassionate pharmacists we should begin by structuring the professional curriculum in order not to lose sight of the patient as a person. This may involve the development of new courses to deal specifically with the issue, or it may consist of infusing a variety of existing courses with more of the human dimensions of health care” (15). Care is seldom routine or predictable, so it is appropriate to create learning environments that place students in unfamiliar situations. In unfamiliar territory, the problem is not at first clear and there is no obvious fit between the characteristics of the situation and the concepts, principles or skills available to the students. In such a situation, students must bring to bear whatever competencies they have on new problems and decide if they are enough or if new skills are required (16).

LEARNING TO CARE IN SIMULATIONS

Practice may be the crucible in which understanding is tested, or in which commitment is affirmed; it’s the pivot point, one might argue,

around which most of education revolves (17). Clinical simulations are such a crucible in health professional education. To engage with others in a caring relationship, students need to appreciate the dynamics involved in human interaction as well as the opportunity to see what it feels like in authentic a manner as possible. "The clinical encounter is an encounter of agents who discern and act in the first person" (18). So, a teaching and learning method such as clinical simulations that gets closer to "first person" interaction is desirable. Also, students need many opportunities over a period of time to "develop personal and interpersonal awareness, to learn to tune into self and others, and to practice translating these perceptions and values into behavior" (19). Furthermore, clinical simulations place the patient or other principals in the health-care setting such as peers or medical colleagues at the center of the decision-making process.

Clinical simulations that involve interaction with a standardized patient (SP) were first developed by Barrows in 1968 and have since been used for teaching, evaluation, and research (20). SPs are trained individuals who provide an accurate and reproducible presentation of a real patient, or in the present project, a pharmacy peer, or physician. The context of the present study is a required, three-credit-hour course in ethics at a school of pharmacy in the Midwest. The students had four opportunities during the course of the semester to interact with a SP in clinical simulations that focused on different ethical issues in pharmacy practice. In order to increase learning and authenticity, the students were presented with complex, clinically accurate simulations involving ethical problems drawn from pharmacy practice. Although the primary focus of the project was to explore the impact of simulations on the students "learning in ethics," there were several opportunities during the project to explore questions dealing with caring behavior.

All clinical simulation "blueprints" include: a list of key ethical issues, instructions for the student, instructions for the standardized patient, peer or physician, a peer evaluation checklist of criteria of the ethical issues and communication skills involved in the specific case, and a self-evaluation of the same criteria in the peer evaluation. The following are the instructions for one of the clinical simulations mainly dealing with the ethical problem of truth-telling or veracity. The students receive the following instructions roughly five minutes before they interact with the SP.

Instructions to Students

You work at an ambulatory geriatric clinic. For the past six months you have been refilling prescriptions for Aricept for Cory Banyon, a 72-year-old man with moderate Alzheimer's disease who resides with his daughter. You participated in the initial interdisciplinary work-up of Mr. Banyon. You recall that he had all the usual signs of Alzheimer's disease such as forgetfulness, sleep disturbances, moderate word-finding difficulties, trouble with getting dressed, and at least two episodes of getting lost. Mr. Banyon was started on Aricept and appears to tolerate the drug with no side effects. Whenever the prescription is refilled, the daughter picks it up. You once asked the daughter how Mr. Banyon was doing and if he needed any counseling. The daughter told you, "He is doing fine. I'd rather you didn't talk to him about his drugs or mention that he has Alzheimer's disease. The diagnosis would scare him to death and there is so little that can be done that it seems kinder not to tell him. We've asked the doctor not to say anything either and he agrees." The receptionist just informed you that Mr. Banyon's daughter dropped him off at the clinic entrance and he is asking for that "nice pharmacist." It seems he has a question about his "medication." Mr. Banyon is waiting to speak with you while his daughter parks the car and then joins him for his appointment with the physician (21).

What the students do not know before entering the room to speak to Mr. Banyon is that he has come to the clinic to meet with the pharmacist armed with his empty prescription bottle for Aricept and an advertisement from a magazine for Aricept explicitly indicating its use in Alzheimer's disease.

Mr. Banyon suspects a connection between the prescription bottle and what the ad says about Alzheimer's disease. He wants to talk to the pharmacist before his daughter enters the pharmacy. The students have 12 minutes to interact with the SP and come to some sort of justifiable resolution. After the interaction, students respond in writing to five reflection questions, and then watch each other's videotaped interactions and complete self and peer evaluations on how well they met pre-established ethics criteria.

PRELIMINARY FINDINGS***Evidence of Caring Language in Clinical Simulations***

One way to isolate an important component of the interaction of the student and the SP is to look specifically at language. Let us look at a few examples of what three students actually said to the SP, Mr. Banyon (or Ms. Banyon in some cases). Here is a transcribed part of the exchange between the first student, L., and the standardized patient playing Mr. Banyon.

L.: I suggest you want to know more about the diagnostic aspects of what you have, the disease you have, Alzheimer's disease. I would suggest talking to your doctor. I can tell you about the drug, the side effects of the drug, how to take the drug, that is the area of my expertise.

Patient: Will I get worse?

L.: I'm going to really leave this one to the doctor. There are plenty of palliative treatments available to patients with Alzheimer's.

Patient: Break that word down. What you just said.

L.: Okay. Basically this is the best time ever in the history of medicine to have Alzheimer's. We have many treatments that were not available 10, 20, 30 years ago. Okay? We actually do treat a lot of patients who would otherwise be, you know, in a state of dementia.

Patient: Dementia?

L.: And they are doing fine.

Patient: What is that?

L.: Forgetfulness, stupor, all the common signs and symptoms of Alzheimer's disease. Okay? Sir, I wouldn't look at this as the beginning of the end. I would look at this as another stage.

Patient: You are not there.

L.: I realize this. I'm just trying to give you the information straightforward on this one. I'm giving you this information for your own care's sake. Okay?

The SP is not pulling any punches in this interaction. He asks hard questions. He repeatedly asks for clarification of technical jargon. L. is responding with facts, perhaps too many facts. In response to direct questions, L. gives advice and reassurance. Does the reassurance work? L. directly told the patient that he has probable Alzheimer's disease. Ethically speaking, he has honored his basic obligation to be honest with his patient. Yet, what does this dialogue tell us about honesty and care? What sorts of language do students use to convey care and concern? Let us turn to another student, E., and look at a different approach to the same clinical simulation. Just prior to the segment transcribed below, the patient had told E. about a friend who was completely incapacitated by Alzheimer's disease.

E.: Sounds like you are a little frustrated? Are you frustrated right now?

Patient: Well, yes, because I didn't know and I *should* know why I have got this. I know how bad it can get. I should know before I get so bad I cannot do things.

E.: Right.

Patient: I wish they told me before.

E.: There is no guarantee that you will be exactly like your friend. The disease progresses differently in different people and I would certainly discuss that with your physician.

Patient: Okay.

E.: This is not the end of the world, okay? There are medications that can be used to help you with this. So just take the medication as it is prescribed to you. Okay?

Patient: Okay.

E.: We are going to help you with this in every way that we can. Okay?

Patient: Okay.

E.: You can come see me. You can come talk to me anytime that you want. Okay?

First, there are many "okays" exchanged between E. and the patient. "Okay" can mean many things such as reassurance, confirmation of un-

derstanding, an opening for further comments and questions, a way to buy time, or submission. E. begins with a basic communication technique to encourage the patient to verbalize and clarify the emotions the student perceives. She also offers her support and follow-up care. She, like L., turns to clichés, such as, “This is not the end of the world,” in this difficult situation to try and comfort the patient. How is this exchange different from the first? Does E. sound more “caring” than L. does? If so, why? Finally, let us look at a brief transcription from a third student, B. and her interaction with Ms. Banyon.

Patient: They are talking about that bad disease.

B.: Alzheimer’s disease?

Patient: Yes. [shaking her head]

B.: There is nothing for you to be afraid of, okay? That is the first thing you need to know there is really nothing for you to be afraid of. You have someone who is taking very good care of you. You have an excellent physician. You are taking a good medication which will help you with your forgetfulness and other symptoms of Alzheimer’s. Because I have not spoken with your physician I am not sure what he has told you or hasn’t told you about this. So, in order to ease your fears, I don’t want you to be afraid because there is really no reason for you to be afraid. That is the first thing I need to tell you but in order for you to feel better about today’s visit perhaps myself and you and your daughter and your physician should get together and make sure that you are really clear as to why you are taking this medication.

B. is trying hard to reassure a frightened patient and perhaps herself. Again, the choice of words may not be the most appropriate and may unintentionally downplay the patient’s feelings the more the student talks. In the last paragraph of the transcription B. is not only trying to calm the patient’s fears, but she offers something to ease those fears, communication with all parties involved. B. is offering to coordinate a meeting between the principals in the situation.

There is so much more that could be said and done with transcriptions, but for the present discussion what do these excerpts of student interactions with SPs tell us about teaching and learning caring behavior? One could ask general questions such as: Were the students sensitive to the patient’s feelings and did they respond appropriately? Did they encourage the patient to express his or her opinions, fears, and values?

Data such as transcriptions not only provide a rich source for faculty speculation but could be used for student learning as well. For example, students could be asked to “transcribe” a part of their videotape and then bring it to a small group discussion about language and care. Written transcriptions, however, do not provide data about the nonverbal component of communication such as tone, pace, loudness, clarity, proxemics, timing, and touch. Therefore, gathering data through videotapes of student interactions with standardized patients provides an unfiltered visual and audio record of events with less possibility of bias. Students and faculty can view the videotaped interactions and look for nuances associated with caring behaviors or see if students and faculty could agree on what behaviors and language express care to patients.

Critical Self-Reflection and Caring Behavior

At its most basic level, reflection on clinical practice is learning from everyday experiences with the intent of realizing desirable practice. “Through reflection, the practitioner (or student) gains insights into self and practice than can be applied either intuitively or deliberately in future situations, like seed planted in the mind that germinate and bloom when the time is right” (22). Critical self-reflection on the clinical simulations is another method to piece together what students learn about caring for patients and colleagues in action and specifically what they learn about their own behavior. After viewing each videotape including their own in small groups of five, students complete a self-evaluation that include the following general self-reflection question: “Consider your strengths and areas that could use improvement and complete the following phrases: (1) a strength I can build on is _____ and (2) an area I could improve is.” The questions are open to reflective comments on any component of the interaction from the simulation such as the ability to identify ethical problems, communication with the patient, or the ability to develop a plan to resolve the problem. The reflection responses from the three students profiled in the previous section all deal with strengthening or improving caring behavior. Critical self-reflection gives us a glimpse of the students’ thinking, values, perceptions, and assumptions about caring. L. stated in response to the question about strengths:

I could come up with a little more empathy to the situation. I hardly ever put myself in the other person’s shoes.

It is hard to see how this could be considered a strength, yet L.'s statement does show some insight into his behavior and an area where he could improve to care for patients. "Putting myself in the other person's shoes" refers to reciprocity, a basic concept in duty-based ethics that was discussed in the ethics course. L. acknowledges that he wasn't as empathetic as he might have been and this is a part of his usual behavior not just in the simulation. L. responded to the question about areas of improvement as follows:

It would seem that I need to be nicer to patients. I display no emotions whatsoever in my talks with patients. Maybe I need to change this.

Watching themselves on tape a safe distance from the actual interaction with the SP, the students have the opportunity to see their interaction objectively. L. describes his behavior, a basic level of reflection, and then questions whether to change it. The seed has been planted for deliberative application to practice. E., the second student, clearly states her strengths:

I was very compassionate to the patient. I was honest with the patient about her disease. I was concerned about the patient's well-being. I also stressed the importance of her family in this situation.

Unlike L., who sees the need to care more for his patients, E. worries about caring too much or in the wrong way.

I need to speak louder and more clearly. I need to cut back on the awkward pauses in my patient interaction. I also became too emotional while telling her the bad news. She began to cry and I cried along with her. I need to maintain my composure and help support the patient.

E. knows that she needs to care about her patient's ordeal but not to the point of being as upset as the patient. She also says that she needs to do something different, but lacks the experience to express a clear plan about maintaining composure and still helping the patient. B. sites her strengths as follows:

Compassion, listening skills, open-mindedness, and the ability to see points of view of everyone involved in the decision-making process.

All the strengths B. listed are basic parts of caring behavior. B. addresses the dual role of being a health professional and the responsibilities of that role versus other kinds of roles such as “friend.”

I need to try and remember that I am also a professional and not necessarily the patient’s best friend. Sometimes I lose sight of why it is I am in the room with patient and what my role truly is.

One of the critical differences between merely reading a patient case study and SP clinical simulations is clear in these students’ self-reflection comments. It is rare for students to worry about over-involvement or “being nicer” when they read a written case study. Unless students construct their own knowledge about caring behavior and reflect on their own behavior, it is like wearing someone else’s clothes, not really a part of them. Critical self-reflection lays the ground work for developing a repertoire of caring behaviors.

Without specific prompting, students reflected on caring behavior. A clear limitation of the evidence presented is that only the responses of three students are presented here. However, their responses leads to some interesting questions in the scholarship of teaching and learning that could be applied to the whole class, not just these three students such as: What are the differences in critical self-reflection between male and female students? Does caring require practice with a variety of individuals? Does the gender, age, other identifying characteristics of the SP affect the students’ caring behavior? Does feedback from the teacher about the content of the self-reflection encourage increasing depth in subsequent written reflections?

Summative Reflections on Learning About Caring

Although the simulations are safer than interactions with real patients and peers, the ethical problem at the center of the simulation made the experience particularly intense. In other words, students were purposefully placed in the center of an ethical problem. So, the simulation was a challenging environment to learn not only about their ability to identify and resolve ethical problems, but also about how to care under difficult, sometimes strained, circumstances.

At the end of the spring 2002 semester, students reviewed all their video interactions and written work across the semester and answered several questions in a summative reflective assignment. The fifth question is germane to the present discussion:

What did you learn about *caring* for patients through the simulation experience and other experiences in the course? Provide evidence from your videotape and written work.

Preliminary analysis of the students' written responses (n = 48) to this question show several underlying themes about what the students learned about caring:

1. General Descriptors of Care
2. Transformative Experiences
3. Caring as a Means to an End
4. Reciprocity
5. Listening and Advocacy

Many students offered more than one example of what they learned about care so their responses could fall into more than one of these preliminary categories. The students' comments about caring behavior refer to their experiences in all four simulations not just the simulation with Mr./Ms. Banyon. It should be stressed that these categories are not the result of a rigorous, multistage, multi-investigator interpretation of the data. Rather, it is the result of a preliminary, individual analysis and should be viewed as such for the present discussion and fodder for further research questions. The categories are presented in order of frequency.

General Descriptors of Care

As was the case with many self-reflection responses the students provided throughout the semester, the majority of the responses to the summative question included descriptions of their own performance attending to general reactions to the concept of care. This level of reflection has been described as practical or technical, that is, students provide "how to" responses (23). Students at this level of reflection describe their experience, performance or procedural aspects of practice. Many responses follow the party line of why care is important in phar-

macy, but provide little insight into what they learned about caring. For example:

I have learned to put patient's interests first.

Caring for patients is a very complicated business.

Caring for patients could put you in difficult dilemmas.

Caring for patients can mean a variety of things, some of which the patient may never see.

Some students in this category placed care in the context of the multiple obligations of pharmacists to patients.

I learned that caring for patients is a huge responsibility as a pharmacist. To help people get better entails not only medicine, but empowerment, empathy and understanding towards the patient.

Transformative Experiences

All caring relationships have a shared core: an understanding of the situation of the other and a commitment to the good of the other. An added characteristic of care is that the relationship often transforms or changes not only the one cared for, but the carer as well. The covenantal relationship described in pharmaceutical care includes this idea of transformation. As early as 1971, Mayerhoff described how care transforms those involved: "Caring involves constantly learning about the other and oneself. There is always something more to learn. Caring overcomes the attitudes that others exist simply to satisfy my own needs/obstacles to overcome or clay for me to mold as I please" (24). Several students echoed Mayerhoff's sentiment.

This case (incompetent, terminally ill patient) opened my eyes to caring for patients where they are not where we think they should be. I am learning to accept people more for being themselves and not who I want them to be.

I always thought I was an open-minded person, but I haven't had enough life experience to justify this. I had always hoped that I would be able to show a true, non-judgmental compassion for pa-

tients with AIDS. However, until this class I didn't know if I would be able to do it. It nearly brought me to tears to find out that I could treat an AIDS patient with care and love.

I've also noticed that once you really care for the patient and care for their best interest, it's almost second nature to have empathy for them and to do whatever it takes to make them feel comfortable.

These students and others who wrote about transformative experiences moved to a more sophisticated level of reflection, that is, interpretive (23). Students ask, "What does this mean," types of questions at this level of reflection. As they begin to develop the ability to move among the principles and constructs in the course, they begin to think more fully about their behaviors and what they mean to their own development as a person and a professional.

Not all students were transformed by the experiences in the clinical simulations. Only three students of the 48 specifically remarked on what they *didn't* learn about caring for patients.

I did not care for the patient in the first simulation. I did not care that the patient had a headache and that she didn't want to change her [drug] regimen. It was difficult to connect with the patient.

I am not sure that I specifically learned anything about caring from the simulations. I think that I am a naturally caring person. However, I think some of the simulations brought out feelings regarding the patient or co-worker.

I do not think that a person can learn to "care" for a patient. We can explain over and over what empathy is and what patients go through as patients, but caring is an innate thing.

These "negative" responses are especially interesting and offer opportunities for further inquiry. For example, what was lacking in the relationship between the first student and the patient with severe headaches? Why didn't the student "connect?" Was the student responding to a stereotype rather than the individual in front of her? Is this statement a sign of lack of self-knowledge either overestimating or underestimating her abilities? The second student's comment is also important. Is caring a matter of good intentions and warm feelings or does it require more of us? The third student's comments are also interesting. Do

teaching methods such as simulations build on strengths the students already possess? If one is a caring person, what does the educational experience or professionalization process add, if anything?

Caring as a Means to an End

The third most common response referred to care as a way to reach important goals in patient care. Care provides a way for pharmacists to fulfill the social and professional responsibilities to achieve benefit and avoid harm through proper drug management.

They may not always agree with you and you might not always agree with them, but compassion and respect will get you a long way with most patients.

I learned that truly showing caring for the patient made all of the difference. I was able to tell that showing empathy in the simulations, won their trust.

Reciprocity

One of the parts of duty-based ethical theories is reciprocity. Reciprocity means the willingness and ability to look at a situation from another's viewpoint and to take that view into account when making decisions. Reciprocity is not sufficient for a justifiable decision but does temper the decision-making process.

Putting myself in the patient's shoes. It really hit me in the last two simulations.

I learned that to truly care for someone you have to put yourself in his or her shoes and treat the patient, as you yourself would want to be treated.

Listening and Advocacy

The last two categories had few responses, but are worth mentioning since some students associated caring with an important communication skill-listening.

I learned that you have to listen to the patient and work through the problem with them instead of telling them what they should do.

Students also used the term “advocate” in their responses, showing a willingness to take on this role in clinical practice.

I learned the importance of being an advocate for the patient when the patient cannot voice her opinion or make a rational decision.

This brief inquiry into what students think they have learned about caring for patients is informative and intriguing. These summative self-reflections tell us that students think about care in many different ways and that they learn different things about themselves and others through essentially the same educational experience. The findings are intriguing because they give us a glimpse into the type of learning that takes place, or does not, along side the “real” focus of our educational aims. Students were supposed to be learning about identifying and resolving ethical problems. Yet, most of them were able to reflect, even if at a basic level, on a completely different aspect of learning. When given the opportunity and the structure to reflect on their learning about care, they were able to describe rich and varied experiences that could be the starting point for deeper levels of reflection or other types of learning activities that focus specifically on care. For example, in the ethics course students could first view their videotaped interactions with the SP to determine if they met the ethics criteria, then view it a second time to look for verbal and nonverbal caring behaviors.

IMPLICATIONS FOR FURTHER INQUIRIES IN TEACHING AND LEARNING

The questions and problems about what is the best way to lead students to care are scholarly research questions, not merely matters of technique and classroom strategies. Randy Bass, a Carnegie Scholar, recently presented a conceptual framework for the path he has traveled in trying to understand how his students learn.¹ The three questions Bass poses provide a helpful way to organize further inquiry into the teaching and learning of care and other values in pharmacy education.

What Works?

Most faculty members begin here in their quest to figure out what is going on in their classrooms and their students’ minds and hearts. Ques-

tions like, “Do my students learn better this way?” fall into this category. We should continue to search for ways to measure learning and the impact of experiences on this process of developing into a caring, competent, professional person. How do we determine the power of the clinical simulations for some and not for others? Which students, why and how? Personally, I am interested in the longitudinal impact of the simulations on moral behavior: could the changes in the students be described as enduring? These types of questions could apply to a number of ability-based outcomes in the pharmacy curriculum.

What’s Possible?

Design questions fall here. We know from specialists in education and interpersonal dynamics that students need repeated experiences to practice these new and complicated ways of working with others (25). What is sufficient experience for students to effectively interact with a wide variety of persons in many different capacities? How elaborate do these experiences have to be to gain the desired outcome? How does earlier content, experiences and activities influence and affect later components of the curriculum and student performance? How costly in terms of time and money are the various methods and components of the design? What are the cost-benefit relationships? What influence do experiences outside the classroom have on the students’ (and faculty members’) experiences inside the classroom (virtual or literal)?

What Is?

What is going on when my students are trying to learn? What are the component activities or skills of caring? What do the students need to do well to be successful at caring? What are the component parts of caring? Through critical inquiry with students, we can identify these component parts; then we can explore skills needed and where this breaks down for students. Are there prerequisites for care? What is the connection between self-awareness, reflection and caring behaviors? How are personal values, beliefs, attitudes, and ability to care integrated?

All the various methods and questions presented here about teaching and learning and caring behavior are useful, not only for the assessment of student competence in this area, but also in formative evaluation at every level of the pharmacy educational experience. Their use will not tell us all we need to know about learning to care, but they will tell us

much more than we have known until now about what works, what's possible, and what is in teaching about caring behavior and its impact on professional development.

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NOTE

1. Personal communication with Randy Bass, Ph.D., regarding presentation on evidence of his journey in search of his scholarship of teaching. Delivered as a plenary address to the 2001-02 Carnegie Scholars Summer Meeting, June, Menlo Park, CA.

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