INSTRUCTIONAL DESIGN AND ASSESSMENT

Heart of Pharmacy: A Course Exploring the Psychosocial Issues of Patient Care

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Objective. To implement and assess the impact of a course utilizing reflective learning to explore the complex, psychosocial human issues encountered in pharmacy practice.

Design. A 1-credit-hour elective course, The Heart of Pharmacy, was offered to all pharmacy students. The course utilized both content and reflective techniques to produce a mutual exploratory learning experience for students, staff, and faculty members. Faculty and staff facilitators observed competencies and used a single group posttest design to assess students' attitudes. In year four, students' written reflections for each session were added and reviewed on a continuous basis throughout the course.

Assessment. Faculty and staff observations indicated that educational outcomes were achieved and student perceptions and evaluations of the course were highly positive. Three major themes were identified in the students' qualitative responses: a recognition of communal support among student and faculty colleagues; a grounding for personal growth and professional formation; a deeper insight into and experience with the role of the pharmacist as compassionate listener and caregiver.

Conclusion. Faculty observations of student competencies and students' perceptions of this course point to the need for pharmacy education to provide organized, structured reflective learning opportunities for students and faculty members to explore the deeper human issues of pharmacy practice and patient care.

Keywords: active learning, emotional intelligence, psychosocial issues, compassionate care, patient care

INTRODUCTION

As more pharmacists move from behind the pharmacy counter and begin providing true pharmaceutical care to patients, the importance of pharmacists having the interpersonal skills needed to connect with their patients has never been greater. The following anecdote shared by a community pharmacist about her first patient encounter during an advanced pharmacy practice experience in pharmacy school demonstrates the need to develop and nurture students' emotional (heart) intelligence as well as their scientific/pharmaceutical knowledge in pharmacy school.

... I was quite nervous because I was going to interact with my very first patient. ... an elderly woman who had been admitted to the hospital due to a digoxin overdose. The patient was going to be discharged and my focus during the assessment and counseling was to make sure that she understood her medication therapy

and avoided another overdose. My patient was very talkative and provided me a lot of background information as well as stories about her family. After spending almost 40 minutes talking with her, I wished her well and went to the nurse's station to write up my notes. As I reached the station, the "code" alarm went off and the response team went running in the direction of my patient's room. I watched as the "code team" tried to revive her, however, the patient died. All I could think about was that I was the last person that she spoke to about her life. When I discussed the situation with my preceptor, he simply said that people handle death differently and people do die in hospitals. I struggled with how my preceptor responded to the situation and minimized the entire event. Even today I think about how throughout my curriculum we discussed how to help patients medically but never how to deal with a patients' emotional or psychological needs in sickness and in dying. I am happy that I was there for my patient and truly listened to her story; however I wish my preceptor had been truly listening to me.¹

Renowned educator, Parker Palmer, in *Courage to Teach* asks, "How can education help professionals keep their hearts alive in settings where people too often lose

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heart?” Parker asserts that we need to educate a “new professional,” taking our students’ *emotional intelligence* just as seriously as we take their cognitive intelligence. He posits that this is the only way we are going to overcome the “hidden curriculum” that gives away our personal power to institutions while teaching students to suppress their emotions to become technicians.²

There is a growing interest in reclaiming humanism within medical education. Examples include Dr. Rita Charon’s work in narrative medicine at Columbia University which helps physicians and medical students with the listening and telling of stories for both the caregivers and the patients³; Dr. Lee Lipsenthal’s course for physicians, residents, and students on *Finding Balance in a Medical Life* and Dr. Rachel Remen’s *The Healer’s Art* course for medical students.^{4,5} The Healer’s Art course is a medical school elective designed by Dr. Remen of the University of California-San Francisco School of Medicine. The course is based on the discovery model of learning, in which there are no right answers and no experts. The Healer’s Art is offered at medical schools across the country, and has been extremely well received and highly rated by students and faculty members because it offers content and experiences not typically found in traditional medical school curricula.⁶ Rabow et al described the results of 25 medical schools offering The Healer’s Art course for medical students and concluded that in teaching professionalism, we should address issues of “emotional safety and authentic community as prerequisites to learning and professional affiliation.” The 2 major and common themes that emerged in the medical students’ responses were a “definition of professionalism in medicine” and “legitimizing humanism in medicine.”⁷

We offered *The Healer’s Art* course to our pharmacy students as an elective in 2004. This offering was successful as evidenced in student and faculty assessment. In addition to Dr. Remen’s work, we were influenced by pioneer educators, Malcom Knowles, who viewed learning as an interactive change process and Tej Steiner who introduced the idea of generating community wisdom with “heart circles.”^{8,9} Upon reflection, we concluded that it was time for pharmacy to engage in its own exploration into humanism and began to create a course more closely aligned with pharmacy practice. We believed that a course devoted to the psychosocial issues of pharmacists as caregivers could address the issues of emotional safety and authentic community in students enrolled in the PharmD curriculum. This belief included the following active-learning principles, which provided the framework for the course: (1) active-learning is a dynamic change process that takes place within the learner; (2) all participants

(faculty, students, and staff) in the course are partners in this interactive process (we are all learners); (3) each learner identifies his/her own learning needs and evaluates the outcomes; (4) learning is enhanced in a safe, confidential, and nurturing environment; and (5) heart circles (small groups) provide a safe place for reflection and a journey into our inner wisdom.

DESIGN

The Heart of Pharmacy course was introduced in winter 2006 as a 1-credit hour elective open to all pharmacy students in all 4 years and consisted of 15 hours of instruction per quarter (five 3-hour sessions that qualified as 1 credit unit). The course was offered as an elective for 2 reasons: (1) students and faculty members needed to be motivated *internally* (as opposed to required) to enroll in the course and (2) the experiential and emotional nature of the course (reflective learning) was a departure from our normal didactic lecture courses, and not all students (or faculty members) were amenable to this approach to learning. There were 3 major instructional elements in this course: (1) case studies (stories) shared by guest healthcare practitioners; (2) student/faculty reflection/sharing in small groups, and (3) student journaling between sessions. Each session consisted of 1.5 hours in a large-group session, followed by 1.5 hours of facilitated small-group sharing (reflective learning). Between sessions, students were expected to spend at least 30 minutes journaling and then e-mail their writing/journal entry to the course moderator. In the large group session, a faculty moderator reflected on the topic for that session and introduced 1 or 2 invited guests who enriched the exploration with their own personal and professional stories (or case studies) while modeling reflective learning. Students were encouraged to listen with their hearts in appreciation and without judgment. Small group facilitators met together with the course moderator immediately after the small group sharing to assess student learning with the objectives for each session and the course moderator shared the tenor of the student journaling from the past session which he/she had reviewed.

Course Topics and Objectives

The 5 session topics featured in the course evolved over the 4 years in which the course was taught based on student and faculty feedback. The framework for our sessions emerged from the story of 17th century apothecary Samuel Browne, who, according to Cown and Helfand in *Pharmacy: An Illustrated History*, kept 2 sets of accounting ledgers in his Salem, MA, pharmacy. In the first ledger he kept account of the charge for the medicine he dispensed and in the second, the charges for his “patient

attendance.”¹⁰ Thus the session topics reflect the major course goal of returning the concept of “attending” to pharmacy practice. The educational objectives for the first session, Tending to Our Patients, were to understand and experience the value of being present and fully attending to another person, with appreciation and without judgment; and to immediately use – and be able to teach – a “heart breathing appreciation” technique.¹¹ The objectives of the second session, Tending to Ourselves, were to recognize the importance of self-care and self-investment for mindful, heart-based work and to raise awareness of our choices about self-care and the sense of balance in our lives. The objectives of the third session, Tending to Life Changes, were to validate the reality of the physical/mental/emotional effects – and side effects – of the flow of life, and to validate for ourselves the healing power of being present and listening with heart. The objectives of the fourth session, Tending to Appreciation and Alignment, were to identify and enhance the intrinsic values of our work; and to recognize or reclaim the joy (sense of accomplishment or contribution) associated with “giving” to others; and to remind ourselves of the impact that we are capable of having on the well-being of others. The objectives of the final session, Translating Heart Matters into Practice, were to summarize the “take away” message from this exploration in reflective learning; to recognize and experience the value of creating “safe places” for our learning; and to apply these concepts to the patient-pharmacist relationship.

The stories (case studies) shared by the guest pharmacists (often alumni or preceptors) or other health practitioners were a key instructional component. Guests often shared personal stories that affected their own understanding and experience of providing and/or receiving attentive care. The small group reflective sessions (“heart circles”) consisted of 5 of 6 students with a faculty or staff member or guest pharmacist facilitator who stayed with the group for all 5 sessions. All small-group sessions started with a heart breathing technique¹¹ or a relaxation technique to set a tone for the discussion and alert the students that this was not a usual didactic discussion. Facilitators were given questions and exercises to facilitate reflection and sharing. For example, in session 2 on Tending to Ourselves (Balance and Resiliency), the suggested questions for reflection include: “Am I living in accordance with the principles that I want my patients to follow to promote better health?” “Can I appreciate myself?” “Without judgment?” “Do I treat myself with the respect and kindness I treat others?” Students could choose pictures (from an assortment) or draw their own illustrating their responses to the following questions: “Do I recognize the signs (physical, emotional, mental)

of stress and burnout in me?” “What is my first reaction when under stress?” “Am I happy with this response?” Students were invited to write or illustrate the “attended” and “not so attended” facets of themselves. In the third session on Tending to Life Changes, students were asked to think about a personal story of change and write, draw, or choose pictures that spoke to that story, or use a story that happened to someone else, even if it was in a book or movie.¹¹ The key reflective question was about transformation, ie, how were you changed by the change? In session 4, Tending to Appreciation and Alignment, the students were asked to reflect and compose a list of “gifts” or “benefits” that they had received from simple everyday pleasures, people in their lives, their own talents, beautiful moments, or small gestures of kindness.¹² They were asked to review their list and look for similarities or groupings within their own lists and then with other students’ lists. The key reflective questions were: “What are the most important things in life?” “Are they in fact things”? What does an ‘attitude of gratitude’ feel like?”¹³ “What is happening to me when I feel gratitude?”

The course used a pass/no pass grading system. For a passing grade attendance at all 5 sessions was required (for both the large and small group components of each session). One excused absence was allowed if the student complied with a written makeup assignment.

EVALUATION AND ASSESSMENT

Evidence of learning and student competency was collected in 3 ways: (1) a questionnaire administered after the course was completed; (2) the faculty/facilitators’ observations of the small groups, which were shared in the debriefing session at the end of every session; and (3) a review of the students’ journals by the course moderator (instituted in year 4).

Student Perceptions

Students’ perceptions of the course were obtained with a questionnaire administered at the end of the last session. The content of this survey included demographic information (age, class in pharmacy school) and their evaluation of the course structure and topics. The questions assessed levels of student satisfaction and insight asking students to indicate their response on a 5-point Likert scale (responses ranged from strongly agree to strongly disagree). The questionnaire also contained open-ended responses.

One hundred six students enrolled in the Heart of Pharmacy course during the 4 quarters it was offered: 30 students in winter quarter 2006, 31 students in spring 2007, 13 students in winter 2008, and 32 students in spring

2009. The drop in enrollment for winter quarter 2008 was primarily due to scheduling problems for both students and faculty as we implemented introductory pharmacy practice experiences (IPPE) for first-year students. Only 1 first-year student enrolled in the course in 2008, which contrasts with the other 3 years when first-year students represented the majority of attendees (63.4%). The course is now open to all students. Twenty-one faculty and staff members and alumni participated as course facilitators from 2006-2008, and 30 guest facilitators from various health disciplines and backgrounds shared their reflections and stories.

Quantitative Response

Survey responses from 106 students conveyed a high degree of satisfaction with the course and the responses were consistent across the 4 years reviewed. On a scale of 1 (poor) to 5 (excellent), students consistently rated the overall quality of the course as very good to excellent. Student satisfaction scores ranged from an average of 4.3 to 4.6 for years 2006 through 2008 (mean = 4.4). In spring 2009, students were instructed to rank key items on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). When asked if the course met their expectations, the majority of the students agreed or strongly agreed (mean value = 4.3). Students were also asked to indicate their level of agreement with various statements about the educational impact (Table 1) and responses suggested that the course was particularly successful in helping them to recognize the importance of (1) self-care (mean value = 4.7) and (2) listening with heart (4.6). All of the statements elicited a positive response (lowest mean value = 4.4) for appreciating the value of the heart coherence technique for relieving stress.

The topics chosen for the 5 course sessions also were well received by the students. The highest marks were evident for the topic the power of listening (mean value =

4.6). Students also were asked to consider when they thought the course should be offered in the PharmD curriculum. This query elicited a broad range of responses including “any time in the curriculum,” “early in the curriculum,” and “just prior to beginning patient care experiences.” Even among older students (who had previously been exposed to the bulk of the curriculum) no general consensus was forthcoming but the students consistently remarked that all students should, at some time, be exposed to this coursework.

Faculty/Staff Observations of Learning Outcomes

Faculty and staff facilitators were debriefed by the faculty moderator after each class session to assess student competencies in meeting that session’s objectives. An underlying objective of the course introduced in session 1 was for students to understand the value of being “fully” present and attending with heart. Across the 5 sessions, and across all 4 course offerings, facilitators observed continuing skill development in the students’ ability to genuinely and openly express themselves and listen to each other without judgment. Facilitators reported that students also became increasingly familiar and comfortable with the heart coherence technique, which was a skill taught in session 1 to help reduce personal stress and improve listening skills while attending to another person’s needs. Session 2 objectives focused on recognizing the importance of self-care for the caring professional. While students could identify and list numerous ways and resources to provide self-care, the students acknowledged that care of self was generally low on their priority list. Facilitators reported concern about the general lack of self-worth they have observed among some of their students. Facilitators also reported that while students often appeared weary and sometimes exhausted, the sharing in the small groups appeared to revive them, and students confirmed this observation (of community support) in their written reflections in the course evaluation. Session 3, which focused on life change, was usually an emotional session in which students recalled their reactions to significant personal experiences. The students were quick to recognize that listening with heart and being present for another person is the most enabling tool they had. One of our pharmacist facilitators who worked in a hospital compassionate care unit explained that he told his students that the most effective way to help their patients and families was to “Don’t just do something, sit there!” In session 4 on Tending to Appreciation, facilitators reported on the uniqueness, maturity, and altruism of the personal meanings that students expressed for entering pharmacy practice, along with a sense of gratitude and accomplishment.

Table 1. Educational Outcomes of the Heart of Pharmacy elective course, 2009 “This course enabled me to... (N=32 responses)

Student Outcomes	Mean Score ^a
Recognize the importance of listening with heart	4.6
Appreciate value of heart coherence to relieve stress	4.4
Recognize importance of personal reflection	4.4
Recognize importance of taking care of self	4.7
Develop comfort with emotional situations	4.4
Reconnect to personal commitment	4.5

^a Responses based on a scale ranging from 1 = strongly disagree to 5 = strongly agree.

Students reflected about the impact of the “gifts” in their lives. Facilitators reported that they were equally inspired, along with the students, as each person shared his/her story. In session 5 on Translating Heart Matters into Life and Practice, students summarized their “take away” messages from the course. What emerged was a sense of belonging to a professional community and a recognition of the significance of their professional roles and responsibilities. The students’ reflections indicated that they had started to “own” the fact that they were becoming pharmacists.

In a sense, the faculty/staff members were “taking the course” with the students. The course was designed as a shared study, faculty were not responsible for “right answers,” and it was only the start of a journey in self-discovery. In the debriefings, the facilitators commented on their own insights and also on their own progress in learning how to “guide” rather than “teach” and in keeping a “safe space” for the students in the rare event a student would forget the ground rules, eg, offer unsolicited advice. Facilitators shared stories from their small groups while being careful to remove all identifying information. One of the ground rules for the small groups was that all sharing within the group was confidential, which facilitated genuine reflective and exploratory work. An unanticipated outcome that facilitators observed was a growing sense of community that developed in the small groups over the 5 sessions. Several small groups continued to meet after the course concluded.

Qualitative Response

We identified 3 themes throughout the students’ responses. Students report that the course provided community, personal growth, and a richer view of professional practice. Students characterized the course as a place where they recognized that they were “not alone” in their personal and professional struggles. Students expressed relief with this insight and welcomed the communal support. Students also reported that the course provided a grounding for personal observation, learning, and growth. Student journals, the small group sharing, and the final course evaluation showed remarkable personal growth and insight. Finally, students recognized that the opportunity to practice attentive listening without judgment in the small groups built confidence in and competency for serving patients.

Student comments helped us validate the need (and the apparent absence of) learning opportunities addressing the psychosocial aspects of patient care as well as the students’ own psychosocial needs. Students commented that this course was the only place where they were able to address the human aspects of their patients, saying that

they were missing the human connection throughout the curriculum. Equally significant were the observations that this class created a sense of community and fellowship that seemed (for these students) to be missing from the pharmacy school experience.

Regarding the course’s applicability to professional practice, students responded that they want to be equipped to address the emotional needs of patients and their families and appreciate these factors as possibly contributing to or complicating the disease state. Students commented that healing is not about medication only and while it is important for us to try to heal patients with our knowledge, we also can heal with our hearts. Several students mentioned that we are the medicine as much as the medicine in our ability to listen with compassion and to care. As one first-year student succinctly put it, “The power of listening is one of the most useful skills any of us could possess.”

The students who have completed the Heart of Pharmacy elective recommend that this course be required for everyone—students, residents and faculty members—because it provides an opportunity to learn how to be fully present and, as one student remarked, (this course) “returns you to the essence of being a human.” The students’ perception of the value of this course is best summed up by a first-year student who said, “It’s rare that students get to have heart to heart conversations about what inspires them, what troubles them, and what they hope for. These conversations build relationships and makes school more meaningful. Pharmacy has a soul, a personality, and passion. It’s not meant for dull, boring, and cold people.”

DISCUSSION

Our instructional design was based on the following assumptions regarding pharmacy practice, pharmacy education, and the recent developments in the fields of psychology, neurocardiology, and wellness. Our first assumption was that pharmacists have the skill and the dedication to address the human aspects of professional practice (the art) as well as the technical aspects of pharmacy practice (the science) to contribute to the overall well-being of patients. Our second assumption was that helping pharmacy students and practitioners connect to their own hearts through an experiential and exploratory learning process was an effective way to develop competencies in addressing the human-centered elements of patient care. Our third and final assumption was that the evolving fields of positive psychology, neurocardiology, wellness, and self-care are providing science-based evidence that is illuminating and explaining the role

(mechanisms) of the heart-based, positive emotions in human interactions.

While we continue to experiment with the scheduling, content, format, and guest lecturer resources for this course, we have learned the following regarding course logistics. Both faculty members and students can use more time between sessions to process the content, so meeting every 2 weeks is more helpful than meeting every week. To assist participants with reflecting, processing, and assimilating the material, we have added a journaling requirement. Guest speakers (“reflectors”) vary somewhat in their ability to grasp the course objective and speak spontaneously from the heart, so we are improving our screening process. A preregistration briefing for students is now required so that student expectations match the course objectives. We have found that the optimal time to schedule this course is in the evening as this time is more conducive for reflection for both faculty members and students.

The faculty/staff observations and the student evaluations have prompted us to consider the following questions: while we educate for professional expertise in pharmacy practice, do we have a responsibility beyond this to educate our students to address the whole patient? As educators are we addressing the whole student? Do we or should we include the concepts of listening with heart and fully attending to our patients without judgment in our curriculum? Where do we include the skill-building competencies to accomplish this? As educators are we role modeling these behaviors ourselves? How can we strengthen and extend throughout our curriculum the sense of community that the students found so supportive in our course?

This is a potentially transformative experiential curriculum. It is not so much “taught” as experienced, reflected upon, and shared in community. The observations of the faculty/staff and the student perceptions of the course are similar to Dr. Remen’s observations with her course for medical students regarding emotional safety, authentic community and humanism in medicine. This confirms for us that we are moving in the right direction. Ideally, we would like to be able to document the course effectiveness and impact in the actual delivery of pharmacist care. Meanwhile, the influence and effect of the course on student wellbeing appears, by their own self-report and faculty/staff observation, to be positive.

SUMMARY

An elective course titled, “The Heart of Pharmacy” was introduced utilizing reflective learning to explore the

complex, psychosocial human issues encountered in pharmacy practice. Faculty and staff observations indicated that educational outcomes were achieved. Student perceptions and evaluations were highly positive. Three major themes emerged in the student evaluations that suggest they were finding faculty and student communal support, a grounding for personal and professional growth, and a deeper insight into the role of the pharmacist as compassionate listener and caregiver.

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