

INNOVATIONS IN TEACHING

Book Club Elective to Facilitate Student Learning of the Patient Experience With Chronic Disease

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Submitted October 1, 2009; accepted December 19, 2009; published April 12, 2010.

Objectives. To evaluate the impact of a book club experience on pharmacy students' learning about chronic illness.

Design. Students read autobiographies/biographies regarding the patient experience of chronic illness. Similar to a traditional book club, small group discussions were held based on questions submitted by students. Other activities included written reflections, a final paper, and an oral presentation.

Assessment. A retrospective pretest and posttest were administered at the end of the course. Students indicated improvement in the key aspects of the course with significant differences ($p < 0.01$) between retrospective pretest and posttest scores for all course objectives assessed. Students also indicated that the course contributed to their development as pharmacists, motivated them to learn about new topics, and helped them reconsider their attitudes.

Conclusion. A book club elective course was successful in helping students understand the patient experience.

Keywords: chronic illness, autobiographies, small group discussion, empathy, compassion, patient care, elective course

INTRODUCTION

Over the last century, the nature of health and health care has changed. Gone are the times when infectious diseases were among the top 10 causes of death. Instead, chronic diseases are the primary causes of death in the United States today. Chronic disease, by its very nature, is not curable and requires a long-term approach to improve health outcomes. With most chronic diseases, adherence to medications and lifestyle modifications are needed to improve patients' outcomes and quality of life.^{1,2}

Over the last 2 decades, there has been an increasing emphasis on patient-centered care with the recognition that the traditional biomedical model is not the best method to treat chronic disease. Inherent in patient-centered care is the need to understand and address patient needs and concerns. The chronic illness experience is not limited simply to the dysfunction of body; instead, it impacts almost every aspect of an individual's life, including life course decisions, family, and work. Caring for patients with chronic illness requires a holistic approach to be successful in improving adherence and patient outcomes. Although a component of holistic care is patient

education, it is not necessarily enough to improve patient adherence to treatment recommendations. Health behavior theory suggests that adherence goes beyond disease or medication knowledge.³⁻⁵ A wide variety of factors influence adherence, including the patient-provider relationship, availability of social support networks, health/illness beliefs, cultural beliefs, self-efficacy (confidence), expectations of treatment, and health literacy.²⁻⁷

Through their recent publications and accreditation standards, the leading organizations in pharmacy education, including American Association of Colleges of Pharmacy (AACP), Accreditation Council for Pharmacy Education (ACPE), and Joint Commission of Pharmacy Practitioners (JCPP), recognize the need for a patient-centered approach to patient care.⁸⁻¹⁰ Patient-centered care is the natural continuation of the pharmaceutical care movement of the 1990s. As a result of this emphasis, pharmacy educators should develop methods to illustrate the chronic illness experience to their students. This is further supported by the Center for the Advancement of Pharmaceutical Education (CAPE) Outcomes, which endorses educational outcomes specifically addressing the application of social/behavioral principles and theories in the design, delivery, and evaluation of pharmaceutical care and the ability to communicate with patients, as well as caregivers.⁸

Although textbooks and lectures can transmit information, they may not foster development of the empathy

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and compassion necessary to deliver patient-centered care. Multiple methodologies should be incorporated into the curriculum to maximize the students' understanding of chronic illness. One way to make the patient experience more real to students is by having them read about the "lived" experience of illness through the autobiographies/biographies of patients and families. Book clubs have been used for a variety of purposes in other disciplines, including education and nursing, to encourage empathy and compassion among students.¹¹⁻¹³ In these book clubs, group discussion, as well as writing assignments, were included as part of course activities. To the author's knowledge, there is limited literature in the use of autobiographies in pharmacy education.

Reading about the patient experience allows students to become familiar with patient issues and develop a holistic view of patient care. In addition, it allows students to reflect upon patients' experiences in a "safe" environment, preparing them for real-life patient encounters and experiential learning.¹³ Students also can make connections between therapeutic content and its potential impact on the patient. The focus of the book club described here was to facilitate pharmacy students' learning about chronic illness by reading about the experience from the patient's point of view, utilizing a traditional book club format. The primary objective of the project was to evaluate the impact of a book club experience on students' learning about chronic illness.

DESIGN

A 1-credit professional elective course, Book Club: Personal Reflection on Patients with Chronic Illness, was designed and facilitated to provide first- through third-year pharmacy students with an introduction to various disease states while addressing the attitudes and concerns of patients. Beyond foundational knowledge regarding disease states and sociobehavioral issues in chronic illness, the purpose of the course was to introduce the concepts of compassion and empathy for those with chronic illnesses, as well as those caring for them, in conjunction with information about chronic diseases/conditions and patient adherence. The learning objectives for the course were:

- (1) Demonstrate evolving skills in the recognition of chronic illness
- (2) Explain the signs and symptoms of chronic illness
- (3) Explain the emotions and concerns of those dealing with chronic illnesses
- (4) Explain the role of the caregiver and the emotions experienced and expressed
- (5) Describe the impact a health care practitioner has on the patient's experience of chronic illness

- (6) Discuss the role of the health care system in the care of patients with chronic illnesses
- (7) Examine patient concerns to identify barriers to adherence
- (8) Develop skills to address patient issues regarding medication therapy
- (9) Demonstrate written and verbal communication skills

Theoretical Framework

Fink's Taxonomy of Significant Learning (Table 2) was used to design the course so that students could connect the concepts learned in core courses in the curriculum to the patient experiences with illness found in the assigned books.¹⁴ According to Fink, when types of learning in the taxonomy interact, they create synergy, thereby maximizing the learning taking place in the student, and producing lasting change that is important to his/her life. This particular taxonomy fits well within pharmacy education since the goal is to create practitioners that are competent, as well as empathetic. Creating connections between didactic content and experiences is essential in educating pharmacy students and maximizing learning. Students often compartmentalize the knowledge they learn in courses, failing to make connections between related information and concepts. Reading about patient experiences allows them to create links between patients' views about the disease and the medication and treatment approaches they learned in class.

Content

Books were selected for the course based on the disease state and types of patient issues they described. The books included: (1) *Needles* by Andie Dominick, (2) *The Center Cannot Hold* by Elyn Saks, and (3) *Strong in the Broken Places* by Richard Cohen.¹⁵⁻¹⁷ In addition, a fictional film, *My Life*, was shown to provide a visual depiction of the dying process. In the second offering of the course, students also read *The Mercy Papers* by Robin Romm.¹⁸ Topics addressed and discussed in each book and the movie are presented in Table 1.

Course Activities

In both course offerings, the main activity in class was small group discussions. Students were required to prepare 3 discussion questions prior to class. In class, students were divided into small groups of 3 to 5 students from 2 or more professional years. The groups were divided in this way so that students could learn from other students who were further along in the curriculum. The groups discussed the assigned readings for the first 20-30 minutes of the class session. The instructor rotated among

Table 1. Topics Addressed in Readings and Movie Viewed as Part of a Book Club Elective Course Intended to Encourage the Development of Empathy and Compassion in Pharmacy Students

Topics	Needles	Center Cannot Hold	Strong in the Broken Places	The Mercy Papers	My Life
Adherence	X	X	X		
Alternative medicine	X		X		X
Attitudes toward medication use		X			
Bipolar disorder			X		
Cancer			X	X	X
Caregiving			X	X	X
Crohn's Disease			X		
Control	X		X		X
Death	X		X	X	X
Depression	X	X	X		
Diagnoses of mental health conditions		X			
Disease complications	X	X	X		
Gender issues			X		
Grief	X			X	
Hospice				X	X
Life course issues	X		X	X	X
Lou Gehrig's disease			X		
Mental health services		X			
Muscular dystrophy			X		
Palliative care				X	
Patient-provider communication	X	X			
Relationships with family and friends	X	X	X	X	X
Reproductive decisions	X				
Schizophrenia		X			
Spirituality/Faith in God			X	X	X
Stigma		X	X		
Suicide	X				
Support groups			X		
Use of restraints		X			
Workplace issues		X	X		

the groups to listen to their discussions, and at times, to answer questions regarding aspects of the book or provide another perspective. Following the small group discussion, the larger group reconvened and discussed the main themes and lessons learned from the weekly reading. Students led the discussion with the instructor acting as a facilitator. After each class session, students were required to prepare written reflections discussing their perspectives on the reading and class discussions.

Students also were required to write a final paper comparing and contrasting 2 of the biographies/autobiographies discussed in class. The instructional goal of this paper was for students to identify and describe links between the patients' experiences to the curriculum and

pharmacy practice. Guidelines were given to students to assist in developing the paper (Table 3).

Finally, students were required to prepare a 15-minute presentation teaching their classmates about a topic related to the readings or class discussions. The instructional goal for this class activity was for students to apply and integrate material they learned from their readings and personal research. Presentation topics included: the use of patient restraints, comparison of mental health services between the United States and United Kingdom, pregnancy and diabetes, eating disorders, and health care costs.

All classroom activities were developed using Fink's Taxonomy of Significant Learning as discussed earlier.

Table 2. Application of Taxonomy of Significant Learning Experiences to Book Club

Category	Taxonomy Description	Course Objective	Book Club Activity
Foundational Knowledge	Understanding and remembering information and ideas	Explain the signs and symptoms of chronic illness Demonstrate evolving skills in the recognition of chronic illness	Reflections
Application	Developing skills, engaging in thinking, managing projects	Develop skills to address patient issues regarding medication therapy Demonstrate written and verbal communication skills	Reflections, Paper, Presentation
Integration	Connecting ideas, people, and realms of life	Discuss the role of the health care system in the care of patients with chronic illnesses Describe the impact a health care practitioner has on the patient's experience of chronic illness	Reflections, Paper
Human Dimension	Learning about oneself and others	Explain the emotions and concerns of those dealing with chronic illnesses Explain the role of the caregiver and the emotions experienced and expressed	Class Discussion, Reflections
Caring	Developing new feelings, interests, and values	Explain the emotions and concerns of those dealing with chronic illnesses Explain the role of the caregiver and the emotions experienced and expressed	Class Discussion, Reflection
Learning How to Learn	Becoming better students, inquiring about a subject, and self-directive learning	Demonstrate written and verbal communication skills	Reflections, Presentation

Since a goal of the course was to help students create connections in their learning between courses, course activities were structured for this emphasis and developed to satisfy each component of the taxonomy (Table 2).

Student Assessment

Scoring rubrics were developed for the evaluation of each course activity. For student reflections, the Post-It Model of developing rubrics was utilized.¹⁹ In this model, students assist in the development of the rubrics, giving them ownership and direction for their own learning. On the first day of class, the purpose of the reflections was described. Students then received 3 Post-It notes and were instructed to write 3 things (1 on each note) that they felt would be important to include or assess in each reflection. Notes were placed on the chalkboard for everyone to view so that students could group similar notes to identify the themes, such as comparing their perspectives to peers, identifying whether feelings or perspectives changed as a result of a discussion, describing what was learned from the reading, and identifying the effect reading/discussion

would have on personal practice. These “themes” formed the basis of the rubric used to assess the reflections.

ASSESSMENT

As part of their online course evaluation, students anonymously completed a retrospective pretest and post-test assessment of their learning in the course. This evaluation approach is similar to a pretest-posttest design, but the retrospective pretest occurs at the same time as the posttest. This approach was utilized because students sometimes are unable to determine what they do not know, particularly when introduced to a new topic, thus biasing the results of a traditional pretest. Using a retrospective pretest is considered a valid method when measuring subjects' recall of how they functioned prior to program outset,²⁰ such as in the case of this course. The retrospective pretest and posttest design also has been used for student assessments in pharmacy education.²¹⁻²⁴

The retrospective pretest and posttest assessments were based on the course objectives. Students rated their ability utilizing a 5-point Likert-type scale on which

Table 3. Guidelines for Final Paper Required in a Book Club Elective Course Intended to Encourage the Development of Empathy and Compassion in Pharmacy Students

Paper Components
Introduction
Description or summary of the similarities and differences between the 2 patient experiences
Interpretation/analysis of the books, including the students' personal analysis, at least 2 links to course material in the curriculum and whether the links were consistent or inconsistent with the topics presented in class
Identify 1 thing (at least) the student felt was learned from reading the book(s) and/or accompanying course content
Impact that the book(s) and/or accompanying course discussions has had on his/her perspective of chronic illness
Assessment of whether the books(s) and/or accompanying course content will have an impact on the student's practice of pharmacy and why/why not
Honest appraisal on whether the student found reading this book valuable and why/why not
Conclusion

1 = strongly disagree and 5 = strongly agree. Students' assessments from both course iterations were combined to facilitate analysis. The Wilcoxon signed-rank test was performed to compare the retrospective pretest and post-test scores.

Students indicated improvement in the key aspects of the course with significant differences ($p < 0.01$) detected for all course learning objectives assessed (Table 4). These objectives were focused on the students developing

an understanding of the patient experience of illness with the goal of improving students' ability to address key issues to adherence in practice. All students indicated they could explain emotions and concerns of those dealing with chronic illness, as well as identify barriers to patients' adherence. Approximately 80% of the students indicated that they believed they would be able to address patient issues regarding medication therapy after completing this course.

Twenty-one students completed course evaluations on an online classroom management system at the conclusion of the course. Items on the course evaluation were based on Purdue Instructor Course Evaluation Service (PICES), which includes approximately 600 validated items for course evaluations.²⁵ Evaluations were collected anonymously, which is consistent with university policy, so students were assured that evaluations could not be identified. Course evaluation data are reported in Table 5.

Overall, students viewed the course positively with regard to their development as health professionals. In addition, students enjoyed learning from one another with over 90% of the students indicating (strongly agree and agree) that they liked being in a classroom with students representing a variety of professional years. Students indicated they engaged in learning outside of the classroom, with 80% (strongly agree and agree) motivated to learn about topics beyond course requirements. Approximately 95% (strongly agree and agree) of students reconsidered many of their former attitudes and learned the value of new viewpoints. Students were slightly less positive with regard to the course's impact on their writing skills

Table 4. Perspectives on Learning in a Book Club Elective Course Intended to Encourage the Development of Empathy and Compassion in Pharmacy Students (N = 20) ^a

	Retrospective Pre-test (%) ^b					Post-test (%) ^b				
	SA	A	N	D	SD	SA	A	N	D	SD
I have skills in the recognition of chronic illness.	15	30	35	20	—	60	35	5	—	—
I can explain signs and symptoms of chronic illness.	5	30	40	25	—	35	60	5	—	—
I can explain emotions and concerns of those dealing with chronic illness.	5	35	25	30	5	75	25	—	—	—
I can explain the role of the caregiver and the emotions experienced.	—	40	20	35	5	40	55	5	—	—
I can describe the impact a health care practitioner has on the patient's experience of chronic illness.	10	40	35	15	—	60	35	5	—	—
I can discuss the role of the health care system in the care of patients with chronic illnesses.	10	35	25	30	—	35	60	5	—	—
I can explain reasons for patient nonadherence to therapy.	10	45	15	30	—	75	20	5	—	—
I can identify barriers to patients' adherence.	10	50	10	30	—	70	30	—	—	—
I can address patient issues regarding medication therapy.	5	30	35	25	5	25	55	20	—	—

^a All items were statistically significant at $p < 0.01$

^b Scale: SA = strongly agree, A = agree, N = neutral, D = disagree, and SD = strongly disagree

Table 5. Course Evaluation Results in a Book Club Elective Course Intended to Encourage the Development of Empathy and Compassion in Pharmacy Students (N = 21)^a

Item	SA (%)	A (%)	N (%)	D (%)	SD (%)
The teaching methods in this course enable me to learn.	71.4	28.6	—	—	—
The course strikes a good balance between reading, discussion, and writing.	52.4	33.3	4.8	9.5	—
The practical application of this course is apparent.	76.2	23.8	—	—	—
The course material appears to be well organized.	57.1	42.9	—	—	—
The amount of material covered is reasonable.	52.4	38.1	—	9.5	—
Assignments are pertinent to topics discussed in class.	52.4	42.9	—	4.8	—
Assignments are of definite instructional value.	42.9	38.1	14.3	4.8	—
The course improved my writing skills.	23.8	47.6	14.3	14.3	—
The course helped me clarify my ideas through writing.	23.8	57.1	19.0	—	—
Student presentations contributed to learning in this course.	42.9	38.1	4.8	9.5	4.8
The course provides an opportunity to learn from other students.	61.9	38.1	—	—	—
Interacting with students from different professional years in class helps me learn.	71.4	23.8	4.8	—	—
I am motivated to discuss new ideas outside of class.	42.9	42.9	14.3	—	—
I learned new ways to think about issues dealt with in this course.	61.9	33.3	4.8	—	—
This course causes me to reconsider many of my former attitudes.	47.6	38.1	14.3	—	—
In this course, I have learned the value of new viewpoints.	47.6	47.6	4.8	—	—
I have been motivated to learn about topics beyond the minimum requirements of this course.	38.1	42.9	14.3	4.8	—
The course material is pertinent to my professional training.	61.9	33.3	4.8	—	—
I developed skills needed by professionals in my field.	57.1	42.9	—	—	—
This course contributed significantly to my professional growth.	66.7	28.6	4.8	—	—
I would recommend this course to other students with career goals similar to mine.	57.1	33.3	4.8	—	4.8

^a Scale: SA = strongly agree, A = agree, N = neutral, D = disagree, and SD = strongly disagree

(71.4% strongly agree and agree) and the usefulness of student presentations (86% strongly agree and agree) to their learning.

In addition, students' final papers were evaluated to determine the learning that occurred in the course, which provides support to the amount and type of the learning experienced by students. Although the students did not "live" the experience of having a chronic illness, their papers reflected that the course assisted in forming a foundation that will help guide them when working with patients. In addition, they commented on how the course helped them see different perspectives, or provided a more holistic viewpoint, than what is learned from traditional coursework and case studies. Beyond learning from the "patients" in the books, a student also remarked on how she came to appreciate the diversity of opinions from group discussions. Rather than judging opinions unlike her own, she learned to listen and respect different viewpoints.

DISCUSSION

The purpose of the book club elective was to introduce the concepts of compassion and empathy for those with (and those caring for persons with) a chronic illness,

in conjunction with learning about chronic diseases/conditions and patient adherence to treatment and medication regimens. Although no textbook or lectures were used to present information about diseases or medication use, students indicated the course contributed to their development as pharmacists. All of the students agreed that the course developed skills needed by professionals in their field, and the practical application of this course was apparent. In addition, approximately 95% of the students believed the course was pertinent to their professional training and contributed significantly to their professional growth.

Although students were positive about the course, they were less so regarding the improvement in their writing skills, with approximately 20 percent either neutral or disagreeing with this item. The use of rubrics may have contributed to this perception. Students knew what was to be assessed in the reflection, which decreased the "guesswork" of students in fulfilling assignment expectations. Approximately 80% of students agreed that the course helped clarify their ideas through writing, which could have been influenced by the rubric. In addition, the students' role in rubric development may have affected their responses.

Fink's taxonomy was utilized to design a course to maximize learning by assisting students in making connections across the curriculum, as well as to engage them in the learning process. In the evaluations, students (81% strongly agree and agree) indicated that they went beyond course requirements in learning about the material, which is consistent with what was seen in a student-led book club in nursing.¹² In addition, the majority of students indicated that they discussed ideas beyond the classroom. Although anecdotal, it was not uncommon for students to look up information to expand on their understanding and then contribute their "research" to class discussions.

Students also commented that they were able to learn about disease states and medications through reading the autobiographies and biographies. They were able to compare what was learned in other classes regarding diseases and medications to the patient experiences described in the books. This allowed the students to observe the entire continuum of an illness and the impact it has on a patient's life. For example, one student commented in her paper that when discussing schizophrenia in a medicinal chemistry and pharmacology class, the focus of the content was on active psychosis. The idea of patients with schizophrenia being lucid had not occurred to her until she read *The Center Cannot Hold*.

Although most of the students (n = 15) enrolled in the course were first-year students, the class composition also included second-year (n = 3) and third-year (n = 6) students. Although not the intent of the course, peer teaching took place among the students, with 95% indicating that the interaction with students from different professional years in class helped them learn. This response most likely reflects students more advanced in the program explaining concepts about disease states and medication to students just beginning the program. Although the composition of the class was relatively uniform with regard to gender, age, and race, there was an enormous diversity of opinions expressed by the students. In some cases, the class discussions made the students reevaluate their perceptions and attitudes, which were demonstrated in both their weekly written reflections and the course evaluation. This increased appreciation for diverse opinions and the need to be open-minded also were observed in a book club described in the nursing literature.¹²

The sharing of knowledge among the students also suggests that they were making links between the book club and the content presented in other courses. In the final paper and weekly reflections, students linked the course material to a wide variety of other courses. Beyond the expected link to communications skills, they cited content in medicinal chemistry, pharmacology, and therapeutics. In addition, they related their learning in the

course to their introductory pharmacy practice experiences (IPPEs), as well as work experiences. In some cases, the elective appeared to help them make sense of their personal or family experiences with chronic illness.

Mann Whitney U comparisons indicated few differences between the 2 course offerings, with the exception of workload. In this case, the course was modified to specifically improve workload issues (eg, reduction of number of required reflections) which resulted in improved scores regarding workload in iteration 2.

Overall, the assessment results supported the use of a book club approach to teaching empathy and compassion in pharmacy education. However, there are limitations to these results, including that students who were already inclined to think about the patient experience may have self-selected to enroll in the course, thereby biasing the results. In addition, it is difficult to know how the course will affect students' behaviors once they become pharmacists and enter practice. Next steps would include expanding the book club to include a larger number of students, as well as longitudinal follow-up of students who took the elective after they enter practice.

Although books, such as autobiographies and biographies, are incorporated at some schools of pharmacy, a course utilizing a traditional book club format is unique. This course was entirely discussion based, allowing students to direct their learning process. The use of reflections provided students with an avenue to write about what they learned, encouraging self-reflection—a skill necessary to becoming a successful health care professional.

SUMMARY

The purpose of this book club elective course was to introduce the concepts of compassion and empathy for patients with chronic illness and those caring for them, in conjunction with discussing chronic diseases/conditions and patient adherence to treatment/medication. The course functioned as a traditional book club that allowed students to exchange ideas, share experiences, and explore concepts beyond what is typically presented in textbooks or lectures. Overall, the goal and course objectives of the course were fulfilled. Students appeared to enjoy the course, were engaged in the learning process, and created connections among concepts in a variety of courses. Through writing reflections and a final paper, students explored the differences in perceptions among patients and health care professionals, as well as reflected on their own learning and attitudes. The success of this course suggests that pharmacy students might benefit from reading biographical and even fictional literature written from the patient's perspective about a variety of illnesses.

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