TEACHERS' TOPICS

A Guided Abstinence Experience to Illustrate Addiction Recovery Principles

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Objectives. To develop and implement an elective pharmacy course that included a guided abstinence experience to illustrate addiction recovery principles.

Design. A 1-credit elective course to illustrate addiction recovery principles was developed and implemented. The course required students to give up a habit for 6 weeks that was causing them problems, meet weekly to discuss addiction recovery processes, and relate their experiences in a journal. Course grades were determined by class participation, submitted worksheets, and submission of the journal and a paper concerning their role as a pharmacist in dealing with those with addictions and in recovery. Pre- and posttests consisting of addiction case scenarios were used to assess students' application of course material.

Assessment. Graded course elements, pretesting and posttesting, and student course evaluations indicated that course objectives were met. Over the past 15 years, student enrollment has grown from approximately 10% of pharmacy classes to approximately 50% (average 31 students).

Conclusion. A guided abstinence experience was an effective tool for teaching pharmacy students the concepts of addiction and recovery.

Keywords: experiential learning, substance-related disorders, pharmacy education, students, addiction

INTRODUCTION

The Center for Advancement of Pharmaceutical Education (CAPE) educational outcomes¹ and the Accreditation Council for Pharmacy Education (ACPE) accreditation standards² include the provision of patient-centered care, systems management, and public health. These guidelines stress the development of effective verbal and written communication, pharmaceutical care planning, collaboration with patients and other health care providers, and professional conduct consistent with established community and professional standards. ACPE accreditation standards guideline 11.2 indicates that active learning should be a key curricular component. Guideline 11.4 advocates college experimentation in curricular design and delivery and the inclusion of innovative teaching methods based on sound educational principles that is adequately assessed to assure effectiveness.

Although colleges of pharmacy teach the pharmacology and toxicology of addictive drugs, including alcohol, traditionally they have taught little about the psychological and social aspects of addiction and addiction treat-

Corresponding Author: Jeffrey N. Baldwin, 986045 Nebraska Medical Center, Omaha NE 68198-6045. Tel: 402-559-6498. Fax: 402-559-5673. E-mail: jbaldwin@unmc.edu ment and recovery support processes.³ A pharmacy faculty survey reported in 1990 revealed that two thirds of respondents believed their alcohol and other drug (AOD) abuse curricular content was inadequate.⁴ Guide-lines for the development of such curricular content were published in the *Journal* in 1991.⁵

Surveys indicate that at least 1 in 10 individuals may have a recent or current substance abuse or dependence problem, while as many as 1 in 4 may have such a problem at some time in their life.⁶⁻⁸ Those with substance abuse or dependency problems may have increased contact with pharmacies as a source of their drugs of choice or for substance-related medical complications. When compared with the general population, it is at least equally likely that health professionals, including pharmacists, will have substance abuse or dependence problems.⁹⁻¹² Thus, pharmacists may commonly encounter situations where they need to provide assistance to addicted individuals, whether patients or coworkers, as well as provide support services for those individuals who are in recovery. However, pharmacists are likely unprepared to provide the comprehensive care services advocated in CAPE outcomes¹ and ACPE standards² in support of addiction assistance and recovery support.

In response to the perceived deficiency in the preparation of our students to effectively provide comprehensive pharmaceutical care services to those suffering from or recovering from psychoactive substance abuse or dependencies, an elective experiential recovery course was proposed, developed, and implemented by a College of Pharmacy faculty member at the University of Nebraska Medical Center and a credentialed addiction counselor from the campus student counseling service. The course developers felt that an abstinence experience would allow pharmacy students to better understand the addiction and recovery processes and relate this knowledge to the pharmaceutical care needs of their patients and colleagues. The objective was to develop, implement, and assess a unique course that allowed students to apply addiction recovery principles to their own recovery experience, analyze their experience through reflective logs, and synthesize and evaluate their addiction recovery experience in the context of their role in dealing with addicted and recovering patients and colleagues.

DESIGN

A 1-semester-hour independent study course was developed and introduced in 1992 with the following goals: (1) to have students experience the process of giving up a problematic habit and relate the experience to addiction recovery processes, and (2) to relate the "abstinence experience" to their role as a health professional in dealing with addicted and recovering patients and colleagues. In 1995, the course became a formal elective entitled *Recovering From Addictions*. The course was offered to first- through third-year pharmacy students who were concurrently enrolled in or had completed the College's substance abuse didactic elective.

Course objectives (with Bloom's¹³ and Fink's¹⁴ taxonomies) included:

- (1) Describe feelings and experiences related to the process of withdrawal from habituating or addicting substances or activities (Bloom's taxonomies: comprehension, analysis; Fink's taxonomies: caring, human dimension, integration).
- (2) Describe the importance of abstinence in the maintenance of recovery from habituating or addicting substances or activities and discuss the implications of relapse to the recovery process (Bloom's taxonomies: comprehension, analysis, synthesis, evaluation; Fink's taxonomies: caring, human dimension, integration, application, foundational knowledge).
- (3) Discuss the importance of support systems in recovery from habituating or addicting substances or activities and describe potential roles for health professionals in such systems

(Bloom's taxonomies: knowledge, comprehension, analysis, synthesis, evaluation; Fink's taxonomies: caring, human dimension, integration, application, foundational knowledge).

(4) Describe the process of addiction and recovery (Bloom's taxonomies: knowledge, comprehension, analysis, synthesis; Fink's taxonomies: caring, human dimension, integration).

The course was taught in a traditional classroom with movable chairs to allow small group discussions of experiences. A whiteboard was used to record student responses to issues being discussed. From 1992 to 2003, the substance abuse counselor who helped to develop the course assisted the pharmacy faculty member with conducting the course and grading student logs. From 2003 to 2007, the pharmacy faculty member has served as the sole instructor and course evaluator.

A student workbook was developed that included a course overview, schedule, examples of habits that could be chosen, grading processes, and worksheets that were to be completed between class meetings. Table 1 details the weekly topics, activities, key issues discussed, and assignments due. Worksheets guided the student in applying principles of the addiction recovery process to their own "recovery." The course instructor reviewed the worksheets and returned them to the students 1 week after submission for students to refer to later in the course.

The workbook and course processes were explained during the first class meeting. Students were instructed that they must give up a habit that they felt was causing them problems for a 6-week abstinence experience.

On the second class meeting, the instructor explained that the students must record their thoughts, feelings, and experiences concerning the abstinence experience twice weekly in a journal. Between week 2 and 3, students completed a baseline log of the behavior they have chosen to give up and submitted it at the week 3 class meeting. They documented consequences they experienced from the habit and what they hoped to gain through the abstinence experience. Students then began their 6-week abstinence and initiated their abstinence experience log entries.

During the 6-week abstinence period, the instructor met with the students to discuss topics relevant to what they may have experienced during the previous week. Open discussion of experiences was followed by structured review of topics to be addressed in worksheets to be submitted the following week. Students completed the abstinence experience on week 9. Students continued to write in their journals for the next week, documenting their feelings about the experience, changes in behavior related to the habit they gave up, and their future plans concerning the habit.

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Week and	Topic - Actions	Key Issues	Assignments Due
1	Course Orientation	Course methods and grading and the process for selection of a habit for abstention	Pretest
2	Selection of "Habit"; Log Instructions - begin log	Identify a habit causing problems and describe reasons for its selection for the abstinence experience	What the student specifically plans to give up and why
3	Compulsion, Anticipating Abstinence - abstinence begins	Define pattern and characteristics of chosen habit; describe how substance abuse and dependence are diagnosed and how tolerance, loss of control and obsession relate to addictions	Baseline behavior inventory
4	Withdrawal, Craving, Triggers	Define withdrawal, craving, triggers and post-acute withdrawal	Worksheets relating student abstinence experiences to the concepts of tolerance, withdrawal, loss of control, obsession, negative consequences
5	Social Support, 12-Step Programs, Alternative Activities	Identify addiction recovery support systems	Worksheets relating student abstinence experiences to the addictive process, post-acute withdrawal, triggers, alternatives, and stages of change
6	Problems - Enablers and Social Prossures: Stress Management	Enablers, social pressures, stress	Worksheets related to recovery
7	Relapse - Slips, Rationalizations	Relapse process and prevention planning.	plaining, support networks
8	Recovery Support	Recovery planning and support networks for addiction recovery	Worksheets related to relapse, warning signs, relapse prevention plan
9	Processing the Experience; Discuss Paper Assignment - mandatory abstinence ends	Cognitive processes in recovery maintenance, personal insights from abstinence, group support	
10	The Addicted Patient	Recognizing and helping addicted patients and colleagues	Worksheet related to cognitive processes maintaining abstinence and submit abstinence log
11	The Recovering Patient	Supporting clients and colleagues in their recovery from addictions and other compulsive behavioral disorders	
12 - 14	No Class Sessions - independent work on paper		
15	Group Discussion; Posttest; Course Evaluation	Open discussion of course experience	Submit paper and written course evaluation and conduct posttest

Table 1. Recovering from Addictions Course Structure

In preparing the log, students were guided by a log instruction sheet that listed 8 items that the student must include in their log: motivation for recovery; withdrawal symptoms, triggers, recovery planning, changes in lifestyle habits, support systems used, slips and rationalizations, and plans for relapse prevention. Students had to identify an example of each of these in their log, highlight it, and number it according to a grading sheet numbering system. Students were instructed to identify what most closely approximated the topic should they not have a direct experience (eg, withdrawal, relapse). The log grading further assessed student efforts to maintain abstinence and deal with slips, participation in their "recovery," selfreflection, and insights gained related to how this experience could relate to working with alcohol and other drug-addicted patients and colleagues.

The role of the pharmacist in dealing with addicted and recovering patients and colleagues was discussed in 2 class sessions using a template of key points. Students were assigned to write a paper of at least 750 words on this subject using a numbered list of issues that must be included in their discussion (Appendix 1). The class did not meet for 3 of the last 4 weeks of the semester. In week 15, a class was held in which students turned in their papers, completed a posttest identical to the pretest, and completed an anonymous course feedback form. Additionally, students were asked by e-mail from college administration to complete online course and instructor evaluations.

Grading was based on class participation (30%), submitted workbook sheets and logs (30%), and the required paper (40%). Changes in student understanding of recommended approaches to addiction-related clinical challenges were further assessed through precourse and postcourse open-ended case scenarios; these were not part of the grade (Appendix 2). Students were asked to list mailbox numbers on these to allow matching of pretests with posttests for comparison. After obtaining approval from the University of Nebraska Medical Center Institutional Review Board, the author conducted an online survey using SurveyMonkey (SurveyMonkey, Portland, OR) during November and December 2007 that asked students still enrolled in the College who had completed the elective in prior years to answer a series of 7 questions related to the course. There was no incentive offered for participation.

To assess students' response on the pretests and posttests, the following grading procedure was used. The instructor (JNB) first listed all the student-mentioned open-ended responses for the first case (question 2, Appendix 2). Next, the instructor identified those interventions that would most likely lead to the most efficient treatment of an addicted individual (an "appropriate intervention") and those interventions less likely to efficiently access treatment (an "inappropriate intervention"). These were sorted into 18 intervention categories and identified as appropriate or inappropriate interventions. Interventions with 2 or more mentions on pretests and posttests are detailed in Table 2, along with the percentage of respondents mentioning each item. The number of mentions of each of the categories at pretest and posttest were tabulated. The differences in the proportions of each appropriate and

Table 2. Resources Identified by Pharmacy Students for
Migraine Patients With Possible Prescription Drug Addiction
(N = 90)

Item Identified	Pretest, %	Posttest, %
Access resources	5.6	5.6
(literature, Web, phone)		
AlAnon	6.7	18.9
Clergy	16.7	1.1
Counselor	3.6	32.2
Employee Assistance Program	11.1	75.6
Express concern to mother	23.3	4.4
Family/friends	16.7	0
Intervention	16.7	50.0
Narcotics Anonymous	70.0	58.9
Pain clinic	6.7	0
Pharmacist	15.6	10.0
Physician	42.2	24.4
Police	4.4	4.4
Psychologist	4.4	0
Treatment	10.0	24.4

inappropriate intervention mentioned at pretest and posttest were compared using chi-square tests or, where appropriate, Fisher exact tests.

ASSESSMENT

During the 2007 course, 5 students gave up nail biting, 5 modified unhealthy dietary habits, 4 increased their physical activity, 2 gave up smoking, and 1 student each gave up excessive Internet use, excessive complaining, a harmful hair manipulation habit, and over sleeping. Abstinence experiences in past years included other behaviors such as alcohol use, excessive speeding, and use of profanity.

For the past 4 years, the majority of course participants have been first-year students in their first semester in our program. Excluding a transition year in 1995 when the course was not offered, 425 pharmacy students have completed the course, with an average enrollment of 26 students per class/course offering. For the past 10 years, approximately half of the students in each pharmacy class (31) have elected to take this course.

Pretests and posttests (Appendix 2) were compared for 3 years, from 2003 to 2005. Ninety (84%) of the 107 students completing the course during that time completed both tests. Prior college courses related to substance abuse had been completed by 16 (18%) of the respondents; of those, 12 had attended the University of Utah School on Alcoholism and Other Drug Dependencies while enrolled in the College of Pharmacy.

There was a significant reduction between pretest and posttest (p < 0.05) in the number of inappropriate interventions listed (personal, physician, clergy, family member, and pain clinic referrals or discussions). There was a significant increase (p < 0.05) in the mention of appropriate interventions (eg, referrals to the mother's employee assistance program, treatment programs, or AlAnon, and arranging an intervention). The author also compared the number of appropriate interventions in terms of likelihood of obtaining appropriate assistance for the patient at pretest and posttest. Among all students, a total of 110 interventions mentioned on the posttest were more appropriate than those listed on the pretest (or 1.2 better responses/respondent out of 3 possible responses).

In question 3 (Appendix 2), pretest and posttest intervention mentions were compared to identify how many of the posttest intervention mentions the author considered more appropriate than the pretest intervention mentions. Seventy (78%) of the posttest intervention mentions were considered better; 12 (13%) were appropriate in both pretests and posttests; 6 (7%) were inappropriate intervention mentions in both the pretests and posttests; and 2 (2%) had fewer appropriate intervention mentions on posttests than on pretests. Eight students (9%) failed to provide intervention mentions that were considered appropriate on posttesting. Chi-square analysis revealed significant increases in appropriate when compared with inappropriate responses (p < 0.05).

For question 4 (Appendix 2), pretest and posttest intervention mentions were compared for each respondent to determine how many students had at least 1 more appropriate response on the posttest than on the pretest. The analysis revealed that 25 (28%) of the posttest intervention mentions had at least two more appropriate mentions; 54 (60%) had one more appropriate mention; 9 (10%) were both considered appropriate on both tests; and 2 (2%) were both considered inappropriate on both tests. No students had posttest results that were worse than pretest results. Thus, 88% of student responses demonstrated improvement, 10% provided appropriate responses at the outset of the course, and only 2% did not improve. Fisher's exact test analysis revealed significant increases in responses considered appropriate when compared with inappropriate responses (p < 0.05).

Online course evaluations were completed by 24 (60%) of the 40 course participants in 2006. The evaluation used the following scale: 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = outstanding. The average scores (and standard deviations) were: course value, 4.2 (0.7); organization, 4.0 (0.8); handout value, 3.9 (0.7); instructor, 4.2 (0.8); and overall course assessment, 4.1 (0.7). Results from the written course evaluation from the 2007 course were submitted by 19 (91%) of the 21 course participants. All respondents indicated that the course met

the defined objectives and their expectations and that they were better prepared to deal with pharmacy issues related to addicted and recovering patients and colleagues as a result of the course; better understood the process of addiction recovery as a result of the abstinence experience; and felt the assignments were appropriate to the course conduct and objectives and their future role as a pharmacist. All but 1 respondent indicated the course had changed their attitudes and beliefs about addiction and addicts; the dissenter considered this a disease prior to enrollment in the course. Comments were consistently positive, including statements such as, "It provided not only information about addictions and recovery but put us in a position to try and get a feel for the challenges a recovering addict faces" and "... there are many faces of addiction and you cannot blame the person, but instead understand that they have a disease. I think it helped me to be more sympathetic and understanding and realize they are suffering from a disease." These results and comments are consistent with those reported in prior years' evaluations.

Twenty-six of 81 (32%) students who had completed the course during a year prior to the 2007 course completed the online SurveyMonkey follow-up survey in late 2007. There were no responses from the 23 students on fourth-year advanced experiential rotations, 10 responses from the 25 third-year students (40%), and 16 responses from the 33 second-year students (49%). Two students (8%) reported the habit they had given up for the course was worse, 9 (35%) said they had returned to the habit at the same level as prior to the course, 14 (54%) said they had positively modified their behavior but had not maintained complete compliance with their abstinence, while 1 (4%) reported he or she had maintained complete abstinence. Two students (8%) said the course had no effect on their ability to deal with addicted patients and colleagues, 10 (39%) stated it had had a minor positive effect, and 14 (54%) felt it had a major positive effect. One student (4%) felt that the course had had no effect on his or her ability to deal with patients and colleagues recovering from alcoholism or other addictions, 7 (27%) felt it had had a minor positive effect, while 18 (69%) felt it had had a major positive effect. Eleven students (44%) agreed that they better understood the process of addiction recovery as a result of their participation in the abstinence experience; the remainder of respondents strongly agreed with this. Asked if their attitudes and beliefs about addiction and addicts had changed as a result of their course participation, 3 (12%) disagreed, 14 (54%) agreed, and 9 (35%) strongly agreed. Asked about their feeling about the course, 1 (4%) indicated he or she might recommend it as an elective for a few students, 19 (73%) indicated they would recommend it as an elective for all students, and 6 (23%) felt they would recommend that the activities in this course be included in the required curriculum.

DISCUSSION

All 4 course objectives are primarily accomplished through the abstinence experience, worksheets and discussions, and abstinence experience log. Abstinence logs and classroom discussions encouraged students to describe feelings and experiences related to the process of withdrawal from habituating or addicting substances or activities. The abstinence experience, abstinence logs, class discussions, and worksheets allowed the instructor to inculcate within the students the importance of abstinence in the maintenance of recovery from habituating or addicting substances or activities, the process of addiction and recovery, and the implications of relapse to the recovery process. Class experience as documented in worksheets and the required paper allowed the students to actualize the importance of support systems in recovery from habituating or addicting substances or activities and to describe potential roles for health professionals in such systems.

They are further reinforced by the discussion and paper related to their role as pharmacists in dealing with addicted and recovering patients and colleagues. The course allows students to experience a form of recovery and, although most habits chosen for abstention are not addictions, student feedback, worksheets, logs, and the paper indicate accomplishment of the higher level Bloom's taxonomic criteria and demonstrate the application of all of Fink's taxonomic elements to addictionrelated practice issues.

The involvement of a substance abuse counselor more experienced than the pharmacy faculty member in the addiction recovery process was instrumental in the design of the course and its related worksheets. Once the course was well established and the author had had experience working with the counselor in the management of the course discussion sessions during the abstinence experience, he was able to manage the course himself when the counselor left the university system prior to the 2004 course offering. Student evaluations indicate that the author's teaching in this capacity has been effective.

The log grading process was initially a time-consuming process undertaken by the counselor. Enrollment in the course grew and students began to question the grading of the logs because they perceived that something in the log applied to a concept, such as withdrawal, that the counselor missed in grading. Apparently, modification of the process would be necessary for efficiency and to focus student learning on core addiction concepts. For the past 4 years, students have been required to identify each of the graded issues in their log by highlighting them and listing the number corresponding to the concept this represents (eg, withdrawal) with each item. Students are instructed that they only need mark each concept once, but may mark several instances if they choose. This has markedly reduced student requests for re-grading and has reduced the turnaround time for grading the logs.

The pharmacist's role papers are graded by the instructor using the defined core template of items that must be included in the discussion. When available points are not earned because of failure to completely discuss a concept or for incorrect information, students are given the opportunity to submit a corrected response to that item within a few days and by doing so may earn up to half of the credit they lost for that item. This is done to encourage students to learn to articulate correct information. This is possible because the course is scheduled to end 1 week before the last week of class so there is time for grading the papers and returning them to the students in campus mailboxes for their review and potential revision prior to finals week.

The online course assessment averages are all in the very good to outstanding range, and the written course evaluations indicate excellent student acceptance of the course and perceived applicability to their future practice. The follow-up SurveyMonkey survey of past course participants revealed that few respondents reported complete continuation of the abstinence chosen for the course, but more than half had positive modifications in their behavior related to the habit or behavior. Improved abilities to deal with addicted and recovering patients and colleagues were reported by 92% and 96% of respondents, respectively. All students reported that they better understood the process of addiction recovery as a result of course participation, and 89% felt their attitudes and beliefs about addiction and addicts had changed because of course participation. These students had also been required to complete the substance abuse elective. Responses indicated that personally experiencing the recovery process helped them to better understand the process of dealing with those who are addicted or in recovery

The survey did not determine whether students who felt that there was no improvement in their ability to deal with addicted and recovering patients and colleagues stated this because they failed to learn the information in the course or because they already knew this information. It is possible that these were among the students who reported on the pretest that they had attended the University of Utah School on Alcoholism and Other Drug Dependencies Pharmacist Section prior to enrolling in the course, so they may have already known this information. Those who indicated that their attitudes and beliefs about addiction and addicts had not changed may have failed to learn the information presented in the course or had attitudes and beliefs prior to taking the course that were congruent with the prevailing medical model of addiction.

A limitation in the assessment process is that the course instructor also served as the evaluator of the pretest and posttest responses to the case scenarios. The definition of preferred methods of referral to assistance resources and advice concerning the use of nonprescription medications and of addicting substance in those in recovery, while based on general recommendations of the recovery community for such issues, were the opinion of the instructor, which may have introduced rater bias into the results. The use of the term "inappropriate intervention" in the context of the statistical evaluation of question 2 of the pretests and posttests is meant to indicate only that this intervention would be less likely to achieve an efficient resolution of the addiction problem and is not intended to suggest that cited examples, such as referral to physicians or pain clinics, may not be a desirable element of a total treatment plan.

Students enrolled in the course must either be concurrently enrolled in or have completed the College's substance abuse course or have attended the pharmacy section at the University of Utah School on Alcoholism and Other Drug Dependencies. Prior completion of such coursework, although only representing a few students, may have slightly confounded the pretest results, while concurrent exposure to addiction concepts in the substance abuse course may have introduced bias in the posttest assessment. Student attitudes about the course may have been influenced by a bias of self-selection, ie, the population not electing this course and the substance abuse course may have done so because of attitudes that differed significantly about addiction or the need for addiction education.

This course has been a popular elective course in the College. Student enrollment in this elective in the College is second only to the prerequisite substance abuse course that the same instructor also offers. While the processes used and the approaches taken may be somewhat unique in a pharmacy education program, the course structure and supporting documentation have been refined to the point that the course could be transferable to other pharmacy colleges. This would best be accomplished through an individual interested in or already involved in substance abuse education in the college. The course should be offered in a configuration similar to this one, ie, as an additional elective where there is a substantial substance abuse course, either elective or required, that serves as

a course prerequisite or is taken during the same semester as this course. Alternatively, the experience could be integrated into a substance abuse course as a means of reinforcing the didactic materials presented in the course.

SUMMARY

A guided abstinence experience was effective in helping students to understand the core elements of the addiction treatment and recovery process and in improving their perceived ability to assist addicted and recovering patients and colleagues. While not always the case, there was evidence of positive behavioral modification and agreement that the course experiences enhanced students' ability to deal with these patients and colleagues. Experiences such as those undertaken in this course are recommended as part of an addictive diseases curriculum for colleges and schools of pharmacy.

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Appendix 1. Paper Grading Criteria

You were asked in class to write a \geq 750 word paper on your role as a professional in dealing with addicted and recovering patients and colleagues. Your paper must include the following numbered headings and discussion of the topics related to the heading as detailed; you may discuss additional issues if you wish as well. Point assignment for each area are listed following the heading in parentheses. Correct word count and readability/writing style will each be assigned 10 points.

- 1. Recognizing addiction in patients (15)
 - Diagnostic criteria
 - Physical signs/behaviors
 - Occupational/ social/ family
 - Recognizing scams/diversion

2. How to get help for addicted patients (10)

- Recognizing and refusing scams
- Resources literature, meetings, evaluation, intervention, treatment
- How to encourage them to access help resources

3. Use of addicting drugs in recovery (10)

- Questions patients will ask about addiction
- Can addicting drugs be used by those in recovery?
- If so, under what circumstances and with what safeguards?

4. Use of mood-altering drugs (that are not addicting) in recovery (10)

- Identify some common mood-altering drugs that are not addicting.
- Can non-addicting mood-altering drugs be used by those in recovery?
- If so, under what circumstances and with what safeguards?
- 5. Providing appropriate information and support for recovering patients (10) (*Note: this is in addition to providing appropriate counseling about addicting and mood-altering drugs*)
 - What resources exist to help support recovery (e.g., literature, support mechanisms, aftercare, monitoring) and how can a pharmacist be involved?

6. The addicted pharmacist (25)

- Recognition (work and other behavioral patterns/diversion)
- Getting help; reporting (mandatory); help resources
- Recovery support contract conditions; return to work conditions/precautions; supporting the recovering pharmacist (relapse/slips; meetings; value as an employee)

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Appendix 2. Recovering from Addictions course preassessment and postassessment

Mailbox Number:_____

- 1. Have you completed any prior college courses related to substance abuse?
 - a. No
 - b. Yes Attended Utah School on Alcoholism and Other Drug Dependencies Pharmacy Section
 - c. Yes Please explain:
- 2. A young woman expresses concern to you about her mother's drug use. You determine that her mother has been seeing many different doctors and obtaining prescriptions for the same narcotic medication from many different pharmacies. Her use clearly exceeds normal therapeutic doses for that medication. Her mother's stated reason for use of the medication is "migraines." Her mother works for a major insurance company in Omaha. What would you suggest that the young woman do to obtain help for her mother? List at least 3 possible resources.
- 3. A recovering patient asks if it is safe for him to take a specific over-the-counter medication for his cold. You determine that there are no addicting substances (such as alcohol) in the product he proposes to use, but there are some with mood-altering properties. How would you counsel this patient?
- 4. A patient comes to you with a prescription for an oral narcotic medication for use in pain resulting from a crush injury to his left leg, resulting in numerous bone fractures. He expresses concern about use of the narcotic since he is a recovering narcotic addict. What would be your advice?