INSTRUCTIONAL DESIGN AND ASSESSMENT

Pharmacy Students' Attitudes About Treating Patients With Alcohol Addiction After Attending a Required Mutual Support Group

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Objective. To implement required attendance at mutual support groups for addiction recovery as a pharmacy skills laboratory exercise, and to evaluate how attendance affected pharmacy students' attitudes about caring for patients with addiction.

Design. Third-year (P3) pharmacy students enrolled in a Pharmacy Skills Laboratory course were required to watch an introductory video about Alcoholics Anonymous (AA) and then attend 2 "open meetings" during the semester. Students submitted a written reflection as proof of attendance.

Assessment. Pharmacy students who agreed to participate in the study completed the Short Alcohol and Alcohol Problems Perception Questionnaire (SAAPPQ) during the course orientation and again at the end of the semester. Mutual support group attendance significantly affected the students' attitudes within the domains of role adequacy, task specific self-esteem, and work satisfaction. Significant changes were not observed within the domains of motivation and role legitimacy.

Conclusion. Mutual support group attendance exposed pharmacy students to the negative effects of alcohol abuse and increased their self-confidence to provide care to patients with alcohol addiction.

Keywords: skills laboratory, Alcoholics Anonymous, Short Alcohol and Alcohol Problems Perception Questionnaire, substance abuse

INTRODUCTION

The Centers for Disease Control and Prevention report that about 51% of adults over 18 years of age are regular drinkers.¹ Although moderate alcohol use may not be harmful, approximately 18 million adults in the United States have alcohol dependence problems and are at an increased risk for organ damage, car crashes, suicides, and homicides.² Pharmacists are among the most readily accessible healthcare providers and may be asked to assist patients with alcohol dependence problems, yet many pharmacists are inadequately equipped with the skills necessary to identify and help them. Neither the Accreditation Council for Pharmacy Education Standards for the doctor of pharmacy (PharmD) degree nor the American Association of Colleges of Pharmacy Center for the Advancement of Pharmaceutical Education Outcomes include the words, "addict, addiction, or alcohol."^{3,4}

The pharmacy education literature focuses on the use or abuse of alcohol and other substances by pharmacy students, and some authors have encouraged the development of college and school policies to address concerns about student alcohol problems.⁵⁻¹¹ However, little has been written about the preparation of pharmacy students to care for patients with alcohol problems.^{12,13}

While the pharmacy skills laboratory course within the PharmD curriculum is ideal for many active-learning scenarios, the setting has limitations when addressing alcohol abuse issues. Skills laboratory faculty members may find that role-play or active-learning scenarios fall short when it comes to educating pharmacy students about the devastating effects of addiction. As a result, the coordinator of the Pharmacy Care Laboratory course at the University of Georgia College of pharmacy hypothesized that attendance at 2 open 1-hour AA meetings would be an effective means of educating students about alcohol abuse issues and significantly impact their attitudes.

Alcoholics Anonymous is a volunteer mutual support group¹⁴ for men and women who wish to attain and maintain sobriety.¹⁵ The only requirement for members is a desire to stop drinking; no dues or fees are collected. "Open meetings" may be attended by visitors who wish to observe how mutual support groups function. The purpose of this study was to determine by administering the SAAPPQ how attendance at AA meetings changed the

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attitudes of pharmacy students about caring for those with addictions.

DESIGN

The Pharmacy Care Laboratory course requirement of the skills sequence at the University of Georgia College of Pharmacy was 5 semesters. Third-year students on the main campus completed the fifth semester (the timeframe for this study) by registering for 1 of three 2-hour sections. For a class of 100, this further reduced the size to about 33 students per section. Laboratory content was delivered in 2-week modules (a total of 6 times). Students received hospital content one week and community content the next.

The University of Georgia IRB approved this study. All P3 students on the main campus of the University of Georgia College of Pharmacy were required to attend 2 open 1-hour AA meetings in lieu of 1 skills laboratory session for the Pharmacy Care Laboratory course beginning in spring 2009. Before students began attending meetings, the local AA chapter was contacted to clarify that the schedule for local open meetings posted on the AA website was accurate and to verify that pharmacy student attendance in small groups at these meetings was acceptable.

During the course orientation, approximately 30 minutes were spent explaining the AA attendance requirement, the rules of AA, what to expect from the experience, and the restriction to visit open meetings only. A schedule of these meetings and their locations was provided. A summary of the orientation materials and an electronic copy of a reflection form were posted online via the course management system. All students were expected to watch a short online video before attending their first meeting. The video explained the background, purpose, and common misconceptions about AA.¹⁶ Proof of meeting attendance was gathered through completion and submission of the written reflections, which were due within 1 week of each attended meeting. The reflection queried students about the "personality" of the meeting, how many people were in attendance, the focus of the discussions, and how participation affected them. To add accountability, students were required to sign the form and indicate the name, date, and time of the meeting they attended. Students were encouraged to attend meetings in groups of 3 to 5 in an attempt to increase safety and to avoid overwhelming the meetings with observers.

EVALUATION AND ASSESSMENT

The SAAPPQ, a validated tool that was originally developed to measure attitudes of general practitioners who worked with patients with alcohol use disorders, was used to assess the impact of the intervention.¹⁷ The SAAPPQ explores 5 attitudinal domains: role adequacy, task specific self-esteem, motivation, role legitimacy, and work satisfaction. Respondents indicated their level of agreement with short statements using a Likert scale ranging from 1= very strongly disagree to 7 = very strongly agree. For this study, 3 additional questions were added to the survey instrument to determine respondent gender, history of alcoholism in the respondent's immediate family (self, siblings, parents, grandparents), and previous participation in AA. All responses were anonymous.

Students enrolled in the Pharmacy Care Laboratory course in fall 2011 (n=105) and fall 2012 (n=110) were invited to participate in the study. Two hundred eleven (98%) students agreed to participate. The SAAPPQ was administered to these students during orientation and again at the end of the semester. No known curricular changes or other experiences that may have affected student attitudes about this content were implemented between fall 2011 and fall 2012. The demographics of students in the 2011 and 2012 groups were similar.

More male (15%) than female students (7%) had attended an AA meeting prior to this laboratory requirement (Table 1). However, the family history of alcoholism was slightly higher among female students (35%) when compared to their male counterparts (30%).

Preintervention and postintervention SAAPPQ scores were compared using the Mann-Whitney U test for unmatched ordinal data using SPSS, version 20.0 (IBM Corp, Armonk, NY) (Table 2). All tests assumed a 5% significance level with a null hypothesis that no difference existed between the preintervention and postintervention groups.

Required attendance at AA meetings affected pharmacy student attitudes in 3 domains. Mean scores for both

Table 1. Characteristics of Third-Year Pharmacy Students Enrolled in the Pharmacy Care Laboratory in Fall 2011 and Fall 2012 (n=211)

Demographics	No. (%)
Gender	
Female	129 (63.5)
Male	74 (17.5)
Alcohol abuse history in family	
Female	45 (34.8)
Male	22 (29.7)
Attended an AA meeting before this laboratory	
Female	9 (6.9)
Male	11 (14.8)
Attended an AA meeting before this laboratory Female Male	9 (6.9) 11 (14.8

Table 2. Preintervention and Postintervention Pharmacy Student Responses on the Short Alcohol and Alcohol Problems Perception Questionnaire (n=211)

Domain and Statement	Preintervention Score, Mean (SD) ^a	Postintervention Score, Mean (SD) ^a	P ^b
I feel I know enough about causes of drinking problems to carry out my role when working with drinkers	4.2 (1.4)	5.3 (1.1)	< 0.001
I feel I can appropriately advise my patients about drinking and its effects	4.8 (1.3)	5.8 (0.8)	< 0.001
Task Specific Self Esteem			
I feel I do not have much to be proud of when working with drinkers	3.3 (1.2)	3.0 (1.3)	0.026
All in all I am inclined to feel I am a failure with drinkers	2.9 (1.0)	2.7 (1.1)	0.017
Motivation			
I want to work with drinkers	3.9 (1.1)	3.9 (1.2)	0.76
Pessimism is the most realistic attitude to take towards drinkers	2.5 (1.2)	2.3 (1.2)	0.25
Role Legitimacy			
I feel I have the right to ask patients questions about their drinking when necessary	5.1 (1.2)	5.3 (1.2)	0.30
I feel that my patients believe I have the right to ask them questions about drinking when necessary	4.0 (1.3)	4.2 (1.2)	0.20
Work Satisfaction			
In general, it is rewarding to work with drinkers	4.1 (1.0)	4.4 (1.2)	0.028
In general I like drinkers	4.0 (1.1)	4.2 (1.2)	0.055

^a Likert scale responses: 1=strongly disagree, 2=quite strongly disagree, 3=agree, 4=neither agree or disagree, 5=agree, 6=quite strongly agree, 7=strongly agree.

^b Mann Whitney U test for unmatched pairs.

statements within the role adequacy domain significantly increased (p<0.001). Students believed that this experience helped them better understand the cause of drinking problems and they believed that they would be better able to advise these patients about the effects of drinking.

Significant changes were also observed for both statements within the task specific self-esteem domain. Statements within this domain queried respondents about their negative feelings about working with drinkers. Mean scores for both questions decreased significantly (p < 0.05)and indicated that students felt more positively about working with drinkers at the conclusion of the course. Within the work satisfaction domain, the mean score increased for the statement regarding the rewarding feelings felt when working with drinkers (p < 0.05) and neared significance (p=0.055) with regard to positive feelings about drinkers in general.

No significant changes occurred between mean scores within the motivation domain. Initially, most respondents strongly disagreed that an attitude of pessimism was the most realistic attitude to take towards drinkers (mean score 2.5) and this disagreement increased only slightly (mean score 2.3) but not significantly (p=0.25). When asked about whether they wanted to work with drinkers, student responses were more neutral (mean score 3.9) and AA attendance seemed to have the least effect on

this parameter as the postintervention score increased only to 3.9 (*p*=0.76).

Required AA attendance affected little attitude change with regard to the role legitimacy domain. Students believed strongly that they had a right to ask their patients about drinking problems at the beginning and end of the course, but no significant shifts occurred (p=0.30). Initially, students felt unsure (mean score=4.0) about whether their patients respected their rights to ask about drinking problems, but they believed this more strongly (mean score=4.2) at the conclusion of the semester.

Reflective comments submitted by students in response to meeting attendance were generally very positive. Two of the most common themes that emerged were "how those struggling with alcoholism look like normal people" and "the meetings were different from what is often portrayed on television and in the movies."

DISCUSSION

Although alcohol abuse issues affect many people, faculty members in colleges and schools of pharmacy are often ill-equipped to prepare students to eventually care for these individuals. Requiring students to attend AA meetings to address these deficits was ideal because it allowed students to observe people actively involved in addiction recovery and to experience the power of fellowship and support.

As initial excitement built about including this requirement in the P3 skills laboratory course in spring 2009, so did anxieties. What would students and other faculty members think about this assignment? How would AA members receive pharmacy students? Would this requirement compromise student safety as they traveled to meetings in various locations around town at all times of the day? Would students receive any benefit from the exercise or consider it folly?

The course requirement has been in place for all P3 students on the main campus for 4 years (approximately 450 students), eliciting several informal observations. Students, though initially nervous, gained a great deal from the experience. In addition, the exercise prompted some students who had alcohol issues to seek help. There have been no reports from students who felt endangered by the assignment. Isolated reports of distress occurred when students attended closed rather than open meetings and members asked them to leave.

Skills laboratories or other faculty members in other colleges and schools of pharmacy could easily implement this novel teaching approach as AA meetings occur around the United States. Although class (and teaching) time was forfeited, faculty members were required to spend time reading and responding to written reflections.

There were limitations to this study. The SAAPPQ was originally developed to evaluate the attitudes of general practitioners about patients with alcohol disorders. Because pharmacy students are not licensed to practice nor do they function as general practitioners, responding to survey questions may have been difficult. The type of AA meetings that students attended were not controlled. Additionally, a few students attended a Narcotics Anonymous (similar support dynamics) meeting instead of 2 AA meetings. It is difficult to know how the variation in meeting attendance affected the study outcomes because differences between AA and NA attendance were not assessed. Also, the effects of other courses could have confounded the results reported here. The college offers addiction elective courses to P3 students during the same semester that the laboratory is offered. The impact these elective courses had on the overall results of this study was likely negligible as enrollment was limited to fewer than 10 students per class. There is a chance that individuals received personal counseling outside of class and this was not controlled. Finally, students reported meeting attendance on the honor system as evidence of their participation, and it was impossible to confirm the number of meetings they truly attended.

SUMMARY

Requiring pharmacy students to attend mutual support groups improved their self-perceived knowledge about alcohol abuse disorders and improved their ability to appropriately advise people with alcohol problems. This out-of-the-box approach serves as an excellent option for teaching students about treating patients with alcohol addiction.

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