Evaluating Pharmacy Students’ Understanding of the Pharmaceutical Industry

James G. Alexander, PharmD., Joseph A. Barone, PharmD., FCCP, Christine E. Novak, PharmD. Candidate, and Lucio R. Volino, PharmD.

ERNEST MARIO SCHOOL OF PHARMACY, RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

INTRODUCTION

Since 1988, Rutgers University’s Ernest Mario School of Pharmacy (EMSOP) has offered an elective course entitled, “Introduction to the Pharmaceutical Industry.” The course is designed to provide students with an overview of the pharmaceutical industry and to raise awareness of a pharmacist’s role in that setting.

OBJECTIVES

The objective of this study was to evaluate the impact of the “Introduction to the Pharmaceutical Industry” course on participating pharmacy students’ perceptions and understanding of the pharmaceutical industry.

METHODS

An anonymous paper-based survey was administered to all students during the first class meeting and then again at the completion of the course. The results of the pre and post course surveys were analyzed and summarized.

RESULTS

Total Surveys Completed = 98 (100%)

- 73% of students reported that they believe the pharmaceutical industry does a good job serving customers PRIOR to taking the course, while 96% of students reported that they believe the pharmaceutical industry does a good job serving customers AFTER taking the course.
- 92% of students reported they had NOT received sufficient information about career opportunities in the pharmaceutical industry prior to taking the course.
- 98% of students reported that they had received sufficient information about career opportunities in the pharmaceutical industry upon course completion.
- 99% of students would recommend this course to other students.

DISCUSSION

The course offered students substantial information concerning potential career opportunities in the pharmaceutical industry. Prior to taking the course, 65% of students stated that they were neutral or somewhat aware of employment opportunities available in the industry prior to taking the course. Upon course completion, 96% of students stated that they were somewhat aware or very aware of career opportunities. (Figure 4)

Students developed an increased level of understanding of the medication development process upon course completion. There was a ten fold increase in students indicating a high or very high understanding of medication development in the industry. (Figure 3)

The course had a positive impact on the students’ perception of the pharmaceutical industry. Before taking the course, 36% of students had a positive or very positive attitude toward the pharmaceutical industry compared to 80% after course completion.

Prior to taking the course, 52% of students were somewhat trustworthy or very trustworthy of the pharmaceutical industry. After course completion, 80% of students were somewhat trustworthy or very trustworthy of the pharmaceutical industry. (Figure 1)

The course generated a 23% increase in the interest level of pursuing a career in the pharmaceutical industry. A decrease was seen in the areas of hospital and community practice. (Figure 2)

CONCLUSIONS

The elective course, “Introduction to the Pharmaceutical Industry” has been offered for 23 consecutive years at EMSOP. The course enhances students’ awareness of career opportunities within the pharmaceutical industry, increases their understanding of the medication development process, and improves their perceptions of the industry.

ACKNOWLEDGEMENTS

The authors thank Elizabeth Krieger, PharmD., John Noh, PharmD., and Twyla Thompson, PharmD. for their efforts in coordinating the course and developing the survey instrument.