Purpose

There are a wide range of post-graduate opportunities available to pharmacy students, including both traditional and nontraditional career pathways. Research has shown that pharmacy students feel they received sufficient information about post-graduate training programs, such as post-PharmD Industry Fellowships, but did not receive sufficient information about industry career opportunities during school. Universities affiliated with post-graduate fellowship programs have put forth an effort to help bridge the identified knowledge gap by providing industry fellowships the opportunity to teach industry related topics in various formats. Expanding upon these efforts, an elective course developed in 2006 designed to introduce information about opportunities within the pharmaceutical industry was restructured to more effectively enhance students' knowledge of functional areas available to pharmacists within the pharmaceutical industry.

Methods

● Post-PharmD fellows designed and implemented a 10-week elective course titled “Introduction to the Biopharmaceutical Industry” which has been offered to professional year one pharmacy students since 2006.

● Instructional elements of the course included:
  – Lectures presented by fellows and industry professionals from seven different functional areas within the pharmaceutical industry
  – Interactive in-class activities designed to reinforce concepts from lectures
  – Final project designed to simulate real-world responsibilities of an industry professional, implemented for the first time during the Summer 2014 semester

● Pre- and post-course surveys were given to students enrolled in the course during the Summer 2014 semester to assess each student's baseline knowledge of the pharmaceutical industry, level of interest in pursuing a career in industry, and each student's individual goals for the course.

Results

● All students enrolled in the elective (n=20) anonymously completed the pre- and post-course surveys.

● Using a Likert rating scale of 1 (not at all informed) to 5 (extremely well informed), students indicated how well informed they were about the pharmaceutical industry on both pre- and post-course surveys; the average response ratings for the two surveys were 2.0 vs. 4.0 respectively (Figure 1)

● After completion of the course, compared to at the beginning of the course, an increased number of students indicated they were definitely interested in pursuing a career in industry (70% vs. 55%) and were able to identify a specific functional area of interest (75% vs. 45%) (Figure 2)

● Using a Likert rating scale of 1 (no prior knowledge) to 5 (extremely knowledgeable), students indicated their current level of knowledge about the pharmaceutical industry on both pre- and post-course surveys; the average response ratings ranged from 1.6-2.3 and 3.8-4.1 on the pre- and post-course surveys respectively (Figure 3a, 3b)

● Areas of improvement indicated on post-course surveys included adding more interactive activities to the lectures to reinforce concepts and offering an onsite visit to a pharmaceutical company.

Conclusion

● Post-PharmD fellows designed and executed an elective course in an effort to increase student's knowledge of the pharmaceutical industry and increase awareness of career opportunities for pharmacists within industry.

● Survey results showed that the course:
  – Increased students’ level of knowledge about different functional areas within the pharmaceutical industry
  – Helped identify specific career areas
  – All students agreed that the course met their individual goals

● Due to the students’ perceived benefit of the course, similar courses will be offered in the future to continually raise awareness of postgraduate opportunities in industry.

References

2. Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation: Nothing to Disclose.
3. Evan Horton, Matt Silva, Nothing to Disclose.

Table 1: Most Common Pre-Course Goals as Indicated by Students

<table>
<thead>
<tr>
<th>Goal</th>
<th>n=20</th>
</tr>
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<tbody>
<tr>
<td>Gain a better understanding of the pharmaceutical industry</td>
<td>100%</td>
</tr>
<tr>
<td>Learn about different career paths for pharmacists within industry</td>
<td>100%</td>
</tr>
<tr>
<td>Become more familiar with Post-PharmD Industry Fellowships</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure 1: Level of Information about Industry

Figure 2: Interest in Pursuing a Career in Industry

Figure 3a: Pre-Course Knowledge Level of 7 Functional Areas

Figure 3b: Post-Course Knowledge Level of 7 Functional Areas