Participants’ Perception of Knowledge Level During and After the Rutgers Pharmaceutical Industry Fellowship (RP457) Program

Ernest Mario School of Pharmacy, Rutgers, The State University of New Jersey

Introduction
During pharmacy school, Doctor of Pharmacy (Pharm.D) are well-trained in the key aspects of drug therapy, including pathophysiology, pharmacology, and clinical applications. By contrast, pharmaceutical industry-based postgraduate training programs provide Pharm.D.s with an opportunity to develop new knowledge and skills through specialized training and hands-on experience in a particular discipline. Little has been done to evaluate the change in knowledge as a result of participating in these types of programs.

Methodology
Design:
A survey was distributed electronically via Zoomerang™ to i) fellows who have recently begun participating in the RPIF Program, and ii) alumni who have recently completed the RPIF Program. Respondents were directed to answer only those questions related to their particular experience. All fellows beginning either a 1- or 2-year program were compared to recent alumni having completed a similar 1- or 2-year program. A total of six fellowship disciplines were assessed: Drug Regulatory Affairs, Clinical Research (Phases I-III), Medical & Scientific Affairs, Marketing & Marketing-related, Drug Information/Medical Education, Drug Safety/Pharmacovigilance.

Survey Questionnaire

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Subjective Assessment</th>
<th>Participant Knowledge</th>
<th>Knowledge After Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>Excellent (5)</td>
<td>Started</td>
<td>Completed</td>
</tr>
<tr>
<td>Regulatory Affairs</td>
<td>Very Good (4)</td>
<td>Started</td>
<td>Completed</td>
</tr>
<tr>
<td>Scientific</td>
<td>Good (3)</td>
<td>Started</td>
<td>Completed</td>
</tr>
<tr>
<td>Overall</td>
<td>Fair (2)</td>
<td>Started</td>
<td>Completed</td>
</tr>
<tr>
<td>Basic (1)</td>
<td>Excellent (5)</td>
<td>Started</td>
<td>Completed</td>
</tr>
<tr>
<td>Very Good (4)</td>
<td>Started</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Good (3)</td>
<td>Started</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Fair (2)</td>
<td>Started</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Basic (1)</td>
<td>Started</td>
<td>Completed</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Survey Questionnaire

Results

Figure 1 illustrates that higher mean scores were reported by recent alumni when compared to current fellows having recently begun the Program when asked to rate their own subjective knowledge of their discipline.

Figure 2 illustrates that recent alumni reported greater overall subjective assessment scores in comparison to current fellows having recently begun the Program.

Alumni of a 2-year program reported higher subjective assessment scores than alumni of a 1-year program (Figure 3).

Results from the factual questions (not shown) indicate that recent alumni scored higher than current fellows having recently begun the Program (mean scores of 3.55 vs. 3.41, respectively).

Discussion
When comparing recent alumni to current fellows having recently begun the Program, results yielded a clear difference in subjective scores across all disciplines.

Cumulative scores for recent alumni were 20% higher than scores for current fellows having recently begun the Program with regard to their self-assessed knowledge level (mean scores of 3.86 vs. 3.16, respectively).

Alumni having completed a 2-year fellowship program have spent more time in the industry setting than those completing a 1-year fellowship. This is reflected in their higher perceived knowledge level.

Recent alumni completing a 2-year fellowship demonstrated a clear difference in their self-perceived understanding of Commercial, Regulatory, Scientific, & Overall aspects by 18%, 23%, and 31%, respectively.

Both subjective and factual scores were higher in recent alumni vs. current fellows who recently began the Program; however, the relationship between these concepts requires further study.

Figures 2 & 3 illustrate the relationship between the two study populations. When comparing recent alumni to current fellows having recently begun the Program, results yielded a clear difference in subjective scores across all disciplines.

Conclusions
- The RPIF program provides an opportunity for career development through 1- and 2-year fellowship programs.
- Recent alumni reported a higher perceived level of knowledge than that reported by current fellows having recently begun the Program.
- Alumni having completed a 2-year fellowship program have spent more time in the industry setting than those completing a 1-year fellowship. This is reflected in their higher perceived knowledge level.

Acknowledgments
- All authors of this study are paid employees of Rutgers, The State University of New Jersey.

References
1. Rutgers Pharmaceutical Industry Fellowship website: bg.pharm.gsu.edu
2. Lam et al. Emerging Trends Within Industry-Based Post Graduate Training Programs for Pharmacists. Presented at the ASHP Midyear Clinical Meeting, Dec 2003; New Orleans, LA

Disclosure
All authors of this study are paid employees of Rutgers, The State University of New Jersey.