RP-671

Evaluating Awareness of Pharmaceutical Industry Career Options and the Rutgers Pharmaceutical Industry Fellowship Program

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BACKGROUND

Pharmaceutical industry-based postgraduate training programs aim to prepare Pharm.D.s to pursue a career within various disciplines of the pharmaceutical industry. Over the past 20 years, there has been a significant increase in the presence and interest level for these programs, however, a study conducted by Yung et al[1] indicated that there was a high degree of variability among pharmacy schools in terms of i) faculty support and ii) availability of opportunities for pharmacy students to gain experience in the pharmaceutical industry. In 2005, a survey of 147 Rutgers Pharmaceutical Industry Fellowship (RPIF) Program candidates revealed that there were many sources of information available regarding the RPIF Program and career opportunities for pharmacists in the pharmaceutical industry. However, the perceived effectiveness of these sources was not evaluated. The RPIF Program, the largest pharmaceutical industry-based postgraduate training program in the nation, expends considerable energy and resources to build awareness among pharmacy students of various pharmaceutical industry opportunities. This study investigated which awareness-building methods are most effective.

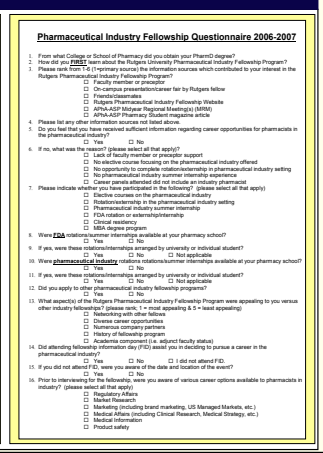
Objectives:

Primary Objective: To evaluate the awareness level of the RPIF Program among current RPIF fellows when they were Pharm.D. candidates in their final year of pharmacy school.

Secondary Objective: To evaluate the information available to Pharm.D. candidates regarding career opportunities available within the pharmaceutical industry.

METHODS

1. A 16-question survey was administered electronically via Zoomerang to sixty-eight Pharm.D. fellows currently participating in the RPIF Program.
   - Questionnaire responses were anonymous.
   - Raw data was collected electronically from October 19, 2006 to October 25, 2006.
2. The questionnaire data was analyzed to identify respondents':
   - Background knowledge prior to interviewing at the ASHP Midyear meeting.
   - Awareness of i) the RPIF Program and ii) career opportunities for pharmacists in the pharmaceutical industry.
   - Sources of information that were useful regarding the RPIF Program and pharmaceutical industry career options.
   - Prior rotation/internship experiences.
   - Assessment of which components of the RPIF Program were appealing versus other industry fellowship programs.



Pharmaceutical Industry Fellowship Questionnaire 2006-2007

1. From what College or School of Pharmacy did you obtain your PharmD degree?
2. How did you **FIRST** learn about the Rutgers University Pharmaceutical Industry Fellowship Program?
3. Please rank from 1-6 (1=primary source) the information sources which contributed to your interest in the Rutgers Pharmaceutical Industry Fellowship Program?
   - ☐ Faculty member or preceptor
   - ☐ On-campus presentation/career fair by Rutgers fellow
   - ☐ Friends or classmates
   - ☐ Rutgers Pharmaceutical Industry Fellowship Website
   - ☐ APhA-ASP Midyear Regional Meeting(s) (MRM)
   - ☐ APhA-ASP Pharmacy Student magazine article
4. Please list any other information sources not listed above.
5. Do you feel that you have received sufficient information regarding career opportunities for pharmacists in the pharmaceutical industry?
   - ☐ Yes ☐ No
6. If no, what was the reason? (please select all that apply)?
   - ☐ Lack of faculty member or preceptor support
   - ☐ No elective course focusing on the pharmaceutical industry offered
   - ☐ No opportunity to complete rotation/externship in pharmaceutical industry setting
   - ☐ No pharmaceutical industry summer internship experience
   - ☐ Career panels attended did not include an industry pharmacist
7. Please indicate whether you have participated in the following? (please select all that apply)
   - ☐ Elective courses on the pharmaceutical industry
   - ☐ Rotation/externship in the pharmaceutical industry setting
   - ☐ Pharmaceutical industry summer internship
   - ☐ Clinical rotation or externship/internship
   - ☐ Clerkship experience
   - ☐ MBA degree program
8. Were **FDA** rotations/summer internships available at your pharmacy school?
   - ☐ Yes ☐ No
9. If yes, were these rotations/internships arranged by university or individual student?
   - ☐ Yes ☐ No ☐ Not applicable
10. Were **pharmaceutical industry** rotations/summer internships available at your pharmacy school?
    - ☐ Yes ☐ No
11. If yes, were these rotations/internships arranged by university or individual student?
    - ☐ Yes ☐ No ☐ Not applicable
12. Did you apply to other pharmaceutical industry fellowship programs?
    - ☐ Yes ☐ No
13. What aspect(s) of the Rutgers Pharmaceutical Industry Fellowship Program were appealing to you versus other industry fellowships? (please rank: 1 = most appealing & 5 = least appealing)
    - ☐ Networking with other fellows
    - ☐ Diverse career opportunities
    - ☐ Numerous company partners
    - ☐ History of fellowship program
    - ☐ Academic component (i.e. adjunct faculty status)
14. Did attending fellowship information day (FID) assist you in deciding to pursue a career in the pharmaceutical industry?
    - ☐ Yes ☐ No ☐ I did not attend FID.
15. If you did not attend FID, were you aware of the date and location of the event?
    - ☐ Yes ☐ No
16. Prior to interviewing for the fellowship, were you aware of various career options available to pharmacists in industry? (please select all that apply)
    - ☐ Regulatory Affairs
    - ☐ Market Research
    - ☐ Marketing (including brand marketing, US Managed Markets, etc.)
    - ☐ Medical Affairs (including Clinical Research, Medical Strategy, etc.)
    - ☐ Medical Information
    - ☐ Product safety

RESULTS

Figure 1: Respondents' Perceptions of Information Received Regarding Pharmaceutical Industry Careers

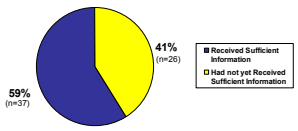


Figure 2: Awareness of Pharmaceutical Industry Career Options Prior to Interviewing for Fellowship

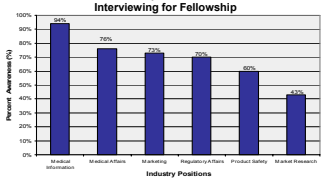


Figure 3: Initial Information Source regarding RPIF Program

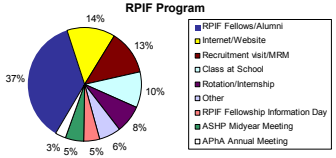


Figure 4: Information Sources Contributing to Interest in the RPIF Program

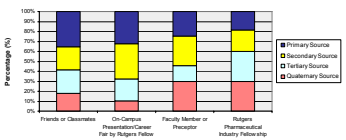


Figure 5: Utilizing Fellowship Information Day towards Pursuing a Career within the Pharmaceutical Industry

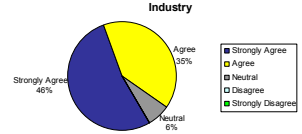


Figure 6: Reasons for Not Receiving Sufficient Information about Pharmaceutical Industry*

	Percentage
Lack of Faculty Support	63%
No Industry Courses Offered	63%
No Industry Internship Opportunities	48%
Lack of Industry Pharmacist Representation during Career Panels	30%
No Industry Rotation/Externship Opportunities	19%

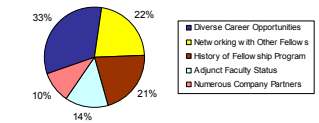
*Respondents include individuals who reported not having received sufficient information regarding pharmaceutical industry careers (n=26).

Figure 7: Respondents' Prior Experience

	Percentage
Pharmaceutical Industry Rotation/Externship	65%
Pharmaceutical Industry Course	51%
Pharmaceutical Industry Summer Internship	35%
Clinical Pharmacy Residency	10%
FDA Rotation/Internship/Externship	6%
MBA Degree Program	6%

Figure 8: Rotation/Internship Availability at Respondents' Pharmacy Schools

Figure 9: Most Appealing Components of RPIF Program Versus Other Programs



DISCUSSION

- The survey completion response rate was 93% (63/68 fellows responded).
- 59% of respondents indicated that they received sufficient information regarding career opportunities within the pharmaceutical industry.
- Approximately 94% of respondents reported that they were aware of Medical Information career options prior to interviewing for the RPIF Program, while fewer were aware of career options in Medical Affairs, Marketing, Regulatory Affairs, Product Safety, and Market Research. This indicates that an opportunity exists to enhance awareness of the diverse opportunities available for pharmacists within the pharmaceutical industry.
- The majority of respondents indicated that their initial sources of information regarding the RPIF Program were current fellows/alumni of the program (37%),the RPIF Program website (14%), and recruitment/MRM visits (13%).
- Of those respondents who felt that they had not received sufficient information about industry career options (n=26), the most frequently reported reasons for this were i) lack of faculty support within the pharmacy schools (63%), and ii) no course focused on the pharmaceutical industry within the pharmacy schools (63%).
- The majority of respondents (92%) indicated that pharmaceutical industry rotations/internships were available, while availability of FDA rotations was less common (68%). In most cases, the University arranged for the rotations/internships rather than the students themselves.

LIMITATIONS

- The survey population consisted of a small subset of graduating pharmacists who successfully attained a position in the RPIF Program. Therefore, the results may not be applicable to a broader population of graduating pharmacists.
- Some of the survey questions required respondents to recollect their thoughts to events that had taken place ten months prior to the survey.

CONCLUSIONS

Many respondents reported a lack of sufficient information regarding pharmaceutical industry career opportunities for pharmacists. An opportunity exists to increase awareness of the RPIF Program and pharmaceutical industry career options by emphasizing the diversity of career opportunities, networking, and history of the program. Future efforts should include stratifying survey responses by the pharmacy school/geographic region the fellow represents to help determine areas in need of more targeted efforts to increase awareness about the RPIF program.

Disclosures:
All authors of this study are paid employees of Rutgers, the State University of New Jersey.

Reference:
1. Yung L, Johal K, Pan J, et al. Fellowship Candidates' Awareness of Pharmaceutical Industry-Based Postgraduate Training Programs and Career Opportunities [poster]. Presented at the 39th Annual American Society of Health-System Pharmacists Midyear Clinical Meeting; December 2004, Orlando, FL.