Pre-Health Students’ Perceptions of the Role of Pharmacists on Healthcare Teams

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Pre-Health Students’ Perceptions of the Role of Pharmacists on Healthcare Teams
Pharmacists

• Practice in over 28 different settings\(^1\)
• Undergo extensive training\(^2,3\)
• Carry out a variety of roles and responsibilities\(^4\)
  • Ensuring appropriate medication therapy and outcomes, health promotion and disease prevention, health systems management
• “Do much more than dispense medication”\(^5\)
Rationale

- Lack of literature exploring perception of pharmacists by pre-health students
- IPEC Core Competency: knowledge of professional roles and responsibilities\(^6\)
- Changing profession’s ability to positively impact patient care
Research Question

How do pre-health students perceive the role of pharmacists on the healthcare team?
Methods:  

Participants & Setting

- Summer Academic Enrichment Program 2015
- Pre-program survey: 34 respondents
  - Dentistry = 12
  - Medicine = 8
  - Pharmacy = 8
  - Physical Therapy = 6
- Average age: 21.1 years
- Healthcare experience: 22 students
- Pharmacy experience: 5 students
- From 10 different U.S. states
Methods: Instruments

- Concurrent, embedded mixed methods
- Optional electronic survey via RedCAP at the beginning of the program
  - Likert scale questions
    - 10 statements
  - Open-ended questions
    - 4 questions
Methods: Likert Scale Questions

<table>
<thead>
<tr>
<th>1-7; Strongly Disagree-Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacists are an important part of the healthcare team.</td>
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<tr>
<td>Pharmacists advise physicians on drug information.</td>
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<tr>
<td>Pharmacists advise patients on drug information.</td>
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<tr>
<td>Pharmacists provide drug information to non-physician members of the healthcare team.</td>
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<tr>
<td>Pharmacists counsel patients on how to take medications prescribed by authorized prescribers.</td>
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<tr>
<td>Pharmacists prevent medication errors.</td>
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<tr>
<td>Pharmacists verify that prescriptions are correct.</td>
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<tr>
<td>Pharmacists are the primary resource for comprehensive medication reviews.</td>
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<td>Pharmacists provide point-of-care testing.</td>
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<td>There are situations in which pharmacists can change a patient’s medication regimen.</td>
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<tr>
<td>Question</td>
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<td>------------------------------------------------------------------------</td>
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<tr>
<td>What does a pharmacist do?</td>
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<tr>
<td>Where do pharmacists work?</td>
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<tr>
<td>What is the role of the pharmacist on the healthcare team?</td>
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<tr>
<td>What is the difference between a pharmacist and a pharmacy technician?</td>
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</tbody>
</table>
Results: *Data Analysis*

- Analysis of Variance (ANOVA)
  - *Health profession of interest*
- Independent samples *t*-test
  - *Healthcare experience*
  - *Pharmacy experience*
- In-vivo coding process
  - 3 member team
Results: **Quantitative**

1: Strongly disagree  
2: Disagree  
3: Somewhat disagree  
4: No opinion/Not sure  
5: Somewhat agree  
6: Agree  
7: Strongly agree
Results: Quantitative

• ANOVA
  • No statistically significant differences between four health professions of interest

• Independent samples t-test
  • Healthcare experience v. no experience
  • Pharmacy experience v. no experience
  • Changing medication regimen ($p = 0.031$)
## Results: Qualitative

Emerging Theme #1: Limited understanding of the role of pharmacists on the healthcare team

<table>
<thead>
<tr>
<th>Findings</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thin code frequencies</td>
<td>“...depending on their specialization in the field of pharmacy, they work alongside the doctor to help the patient.”</td>
</tr>
<tr>
<td>Few references to other members of the team</td>
<td>“They make sure that the patients are well.”</td>
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<tr>
<td>Vague responses</td>
<td></td>
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</tbody>
</table>
Results: Qualitative

Emerging Theme #2: Underdeveloped recognition of pharmacy practice settings

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<tr>
<td>Large recognition of pharmacists in hospitals (25) but few in clinical settings (3)</td>
<td>“Pharmacists can work in hospitals, or in pharmacies such as Walgreens or CVS.”</td>
</tr>
<tr>
<td>Retail pharmacy commonly mentioned (24)</td>
<td>“They usually work in an area to distribute such drugs.”</td>
</tr>
<tr>
<td>Low code frequencies for other settings</td>
<td></td>
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</tbody>
</table>
Results: \textit{Qualitative}

Emerging Theme #3: Perception focused on pharmacists’ dispensing responsibilities

<table>
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<tbody>
<tr>
<td>Dispensing was the most frequent code (21)</td>
<td>“Pharmacists fill prescriptions for patients”.  \newline “...manages the organizing and dispensing of various medications prescribed by physicians.”</td>
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</tbody>
</table>
Discussion

• Implications for health career decision making
  • Pre-pharmacy students
  • Other pre-professional health students

• Value of role & responsibility exposure in professional level interprofessional education activities

• Visibility of the pharmacy profession
Conclusion

• Perception is that pharmacists’ role is important, but knowledge of responsibilities is limited

• Importance of IPE to gain knowledge and appreciation for other health professions

• Pre-professional level could be a critical time for IPE exposure
Future Work

• SAEP 2016
  • Undergo second round of data collection

• Pre-/Post-Program
  • **Research Question #2:** How do pre-health students’ perceptions of pharmacists on the health care team evolve after participating in the Summer Academic Enrichment Program at VCU?
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• **Amy Taloma**, M.Ed., Assistant Director, VCU Division for Health Sciences Diversity
• **SAEP 2015 Coordinators and Staff**
Questions or Comments
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Key References


