Perceptions and Attitudes of Graduating and Recent Graduate Pharmacists on the Pharmacist’s Role in Combating Antimicrobial Resistance

Yuman (Yumi) Lee, PharmD, Associate Clinical Professor, Emily Ambizas, PharmD, Associate Clinical Professor, Jordan Denas, PharmD, Ming San Ho Zhen, PharmD, St. John's University College of Pharmacy and Health Sciences, Queens, NY

Antimicrobial resistance is a global, public health crisis as declared by the Centers of Disease Control and Prevention. The Joint Commission has also mandated a new antimicrobial stewardship standard effective January 1st, 2017. Pharmacists have a responsibility to take prominent roles in antimicrobial stewardship programs.

St. John’s University College of Pharmacy and Health Science graduates an average of more than 200 Pharm.D. students per year. Antimicrobial stewardship has not been a focus of our curriculum. Our hypothesis is that graduating and recent graduate pharmacists of our program may not have a great perception and attitude towards their role in combating antimicrobial stewardship.

The objective of this study is to evaluate the perceptions and attitudes of graduating and recent graduate pharmacists on antimicrobial resistance, antimicrobial stewardship, and the pharmacist’s role in these specified areas.

Methods

A voluntary, anonymous electronic survey (via Google forms) was distributed via email to St. John's University P4 pharmacy students with an anticipated graduation date in 2018, as well as recent Pharm.D. graduates from 2016/17 (n=657). IRB was granted from St. John’s University and consent was obtained from all participants.

The survey consisted of 20 questions collecting the participants’ baseline demographics and assessment of his or her perceptions and attitudes using a 5-point Likert Scales (strongly agree to strongly disagree and from always to never). The results of this study were analyzed using quantitative analysis.

The authors of this study do not have any financial disclosures to report.

Background

Objective

Results

Conclusions

Both graduating and recent graduate pharmacists expressed their awareness of antimicrobial resistance, antimicrobial stewardship and the pharmacists’ role in these specified areas. However, fewer participants felt that their individual efforts impact antimicrobial resistance and only a minority of participants reported to be involved in antimicrobial stewardship activities. An emphasis on antimicrobial stewardship in the curriculum is crucial in preparing pharmacists in our combat against antimicrobial resistance. Further participation in antimicrobial stewardship certification programs may also be beneficial. However, opportunities for pharmacists to practice antimicrobial stewardship activities may remain a challenge. Limitations of this study includes a small sample size from a single Pharm.D. program with a response rate of 13.1% (86/657). Majority of the participants were P4 pharmacy students and thus results may not capture a true reflection of practicing pharmacists.

Figure 1. What year did you or will you be graduating? (n=68)

Figure 2. Have you taken the Infectious Diseases elective? (n=68)

Figure 3. Have you taken an Infectious Diseases focused APPE rotation? (n=68)

Figure 4. Have you completed or currently completing post graduate training? (n=34)

Figure 5. Where do you currently practice? (n=34)

Figure 6. What is your current role? (n=34)

Figure 7. Overall response of survey questions I (n=86)

Figure 8. Overall response of survey questions II (n=86)