Comparing the Impact of an Infectious Disease Elective on Students and Alumni

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Objective: To determine whether a didactic infectious disease elective offered through Southern Illinois University Edwardsville School of Pharmacy is effective in increasing the confidence of students and alumni in treating five common infectious diseases. Methods: An anonymous online survey was distributed to third and fourth-year pharmacy students and alumni who did or did not take the didactic infectious disease elective during their time in pharmacy school. Participants indicated their confidence in treating five infectious diseases using a five-point Likert scale. These infections included cystitis, Clostridium difficile, cellulitis, otitis media, and community-acquired pneumonia. Descriptive statistics were utilized in summarizing the demographic data. A Chi-square analysis was used to determine if a difference existed between the two groups. Results: A total of 112 students and alumni participated in the study. Of those, 30 participants completed the infectious disease elective. In the treatment of each infection, more participants who completed the elective indicated confidence compared to those who did not complete the elective. Of the thirty participants who took the elective, 100% felt confident in their ability to treat cystitis compared to 76% of those who did not take the elective ($p=.003$). Similarly, 97% felt confident in their ability to treat Clostridium difficile compared to 73%, respectively ($p=.006$). In the treatment of cellulitis, 77% felt confident compared to 52%, respectively ($p=.021$). In the treatment of otitis media, 80% felt confident compared to 73%, respectively ($p=.46$). Finally, in the treatment of community-acquired pneumonia, 90% felt confident compared to 67%, respectively ($p=.015$). Conclusions: Increased exposure to infectious disease concepts by means of a didactic elective lends confidence to students and alumni in treating four infectious diseases.