demands (55%) followed by uncertain diagnosis of bacterial infection (22%) and short appointment visit times (11%). Providers that spent ≤20 minutes per visit were more likely to feel pressured to prescribe antibiotics for upper respiratory tract infections (URI) to ensure patient satisfaction than those who saw >20 minutes (41% vs. 7%, P = 0.024). Additionally, providers who saw >50 patients per week were more likely to feel pressured to prescribe antibiotics for URIs than those who saw ≤50 patients (50% vs. 18%, P = 0.009). Only 42% of providers selected the correct answer that 90–98% of URIs are viral. The majority of providers strongly agreed that antibiotics are over-used (71%) and inappropriate antibiotic use can lead to resistance (82%). Thirty-eight percent of providers never heard the term antibiotic stewardship or heard the term at all, but were unsure about the definition. However, more than 75% of providers strongly agreed or agreed that they were interested in receiving more education regarding antibiotic stewardship.

Conclusion. Variability exists among providers’ knowledge and attitudes toward antibiotic stewardship and antibiotic prescribing in rural outpatient settings. Increased educational efforts are warranted to increase consistency of these concepts and practices.

Disclosures. All authors: No reported disclosures.

1304. From Information Bolus to Continuous Infusion: Resident Knowledge and Satisfaction With an “Antibiotic of the Month” Educational Initiative at an Academic Children’s Hospital

Theresa Madigan, MD; Luke Radel, MD; Yasanam Fatemi, MD and Neupane Kamalpaele, MD, MS; Divisha V, Pediatric Infectious Diseases, Department of Pediatric and Adolescent Medicine, Mayo Clinic, Rochester, Minnesota, 3Department of Pediatric and Adolescent Medicine, Mayo Clinic, Rochester, Minnesota

Session: 143. Medical Education
Friday, October 5, 2018: 12:30 PM

Background. Medical trainees play a critical role in the prescribing of antimicrobials. Prescribing education is one of the CDC core elements of antimicrobial stewardship programs. Previous efforts to educate critical care residents about antimicrobials have not been identified; however, the common practice of teaching all classes of available antibiotics over a short period of time (usually a single 1–2 hour lecture or “bolus”) is generally not well received and likely ineffective.

Methods. We developed a novel antibiotic of the month (AOTM) education program (“continuous infusion”) for pediatric residents. It included a monthly 10-minute presentation by an infectious diseases physician or fellow about a single commonly prescribed antibiotic, a handout summarizing important aspects of the antibiotic and a display posted in the resident workroom. An anonymous survey was sent to pediatric residents before and 6 months after implementation of the AOTM program. The survey consisted of questions on demographics, satisfaction with the program, and antibiotic knowledge. Responses were tabulated and analyzed using Microsoft Excel. Responses were summarized and reported as a proportion of total responses.

Results. Both pre- and post-implementation surveys were completed by 21 pediatric residents (51% response rate). Prior to the AOTM program, 55% of respondents felt very or somewhat uncomfortable about their current level of knowledge about antimicrobials and antimicrobial prescribing. Six months after initiation of the program, 86% and 76% agreed strongly or agreed that their knowledge of antimicrobials and antimicrobial resistance, respectively, had improved. After introduction of the program, 81% felt more comfortable or much more comfortable with antimicrobial prescribing. Fifty-seven percent had referenced the handout at some point after the program was implemented. A Mann–Whitney U test was used to determine factors that were associated with significant differences in knowledge scores and attitude scores. The primary outcome measure of this study was to determine positive predictors of increased confidence in prescribing antimicrobials in the future using multivariate analysis.

Conclusion. A continuous infusion of antimicrobial education in the form of an AOTM education program was well received among pediatric residents and increased their knowledge and comfort level with antimicrobial prescribing. Further studies to measure knowledge retention with this strategy are required.

Disclosures. All authors: No reported disclosures.

1305. Application of Standard Antibiotic Use Criteria to Evaluate Inpatient Antibiotic Use

Maureen Campbell, PharmD; Emily Dionne, PharmD; Elizabeth Radigan, PharmD; Gall Scully, MD, MPH, FSHFM; Moamen Al Zoubi, MD; Iva Zivna, MD and Nicole Theodoropoulos, MD; 1Pharmacy, UMass Memorial Medical Center, Worcester, Massachusetts, 2Infectious Disease, UMass Memorial Medical Center, Worcester, Massachusetts

Session: 143. Medical Education
Friday, October 5, 2018: 12:30 PM

Background. Application of standard antibiotic use criteria can assist inpatient antimicrobial stewardship. Overuse of antibiotics over a short period of time (usually a single 1-2 hour lecture or “bolus”) is generally not well received and likely ineffective. We aimed to determine whether Spivak’s criteria for antibiotic use were consistent between different evaluators.

Methods. A chi-squared test assessed changes pre- to post-assessment.

Disclosures. All authors: No reported disclosures.

1306. Antimicrobial Resistance Knowledge, Attitudes, and Perceptions Among Medical Students in Southern India

Olivia Menden, Bachelor of Science; Sumathi Prabhu, PhD; Veena Shetty, PhD; Chandini Pandith, BSc; Shobha Giri, BSc; and Avinash Shetty, MD; 1Wake Forest School of Medicine, Winston-Salem, North Carolina, 2Manipal Institute of Technology, Manipal, India, 3Department of Microbiology, K.S. Hegde Medical Academy, Nitte University, Mangalore, India

Session: 143. Medical Education
Friday, October 5, 2018: 12:30 PM

Background. Antimicrobial resistance (AMR) is a major public health problem in India. The World Health Organization recognizes that the education of medical students about critical roles of antimicrobials in the future is an important educational strategy. However, data related to knowledge, attitudes and practices (KAP) regarding AMR is limited in India.

Methods. This cross-sectional study was conducted in July-August 2017. Medical students at K.S. Hegde Medical Academy in Mangalore, India were surveyed with an anonymous questionnaire using a convenient sampling method involving second year, third year, fourth year, and intern students (n = 347). Data about demographics, sources of information, and antimicrobial training were collected. In addition, AMR knowledge and attitude scores were calculated. A Mann-Whitney U test was used to determine factors that were associated with significant differences in knowledge scores and attitude scores. The primary outcome measure of this study was to determine positive predictors of increased confidence in prescribing antimicrobials in the future using multivariate analysis.

Results. A total of 347 surveys were analyzed (response rate of 98.9%). The mean total knowledge score was 11.47 out to 31 with a standard deviation (SD) of 3.39, and the mean attitude score was 5.99 out of 16 (SD = 4.207). While 13.2% of students were very familiar or familiar with the term “Antimicrobial Stewardship” and 88.2% of students said they would like more antimicrobial education in medical school. On multivariate analysis, female gender (OR 2.51, 95% CI (1.51, 4.18)), clinical vignette antimicrobial knowledge scores (OR 1.26, 95% CI (1.05, 1.51)), positive attitude scores (OR 0.94, 95% CI (0.88, 0.995)), awareness of Infection Control Policy (OR 1.87, 95% CI (1.3, 2.32)), and > 3 years of antimicrobial prescribing clinical training (OR 2.48, 95% CI (1.29, 4.75)) were predictors of confidence in antimicrobial prescribing.

Conclusion. This study identifies several possible interventions for improving confidence such as increased clinical knowledge through clinical experience, increased awareness of infection control policies and antimicrobial guidelines, and empowering students to be antimicrobial stewards to combat AMR.

Disclosures. All authors: No reported disclosures.

1307. Emerging Treatments in Ongoing Battle Against Community-Acquired Bacterial Pneumonia (CABP): The Positive Impact of Online Education

Soni Huest, PhD and Susan Smith, MN, PhD; 1Medscape, LLC, New York, New York, 2Medscape Education, New York, New York

Session: 143. Medical Education
Friday, October 5, 2018: 12:30 PM

Background. The leading infectious cause of hospitalization and infection-related mortality, pneumonia impairs a significant, but often underappreciated, burden. Agents in the antibiotic pipeline have the potential to improve both individual and public health, as well as support antibiotic stewardship programs.

Methods. To address knowledge gaps among ID specialists, a CME/CE-certified, 80-minute, video-based, multidisciplinary panel discussion was developed and posted online on March 27, 2018. Featuring four expert faculty, the activity addressed: The evolving etiology of CABP; Emerging antibiotics for CABP treatment; and Antibiotic stewardship.

Evaluations were assessed with a repeated-pairs pre-/post-assessment study design, in which each individual served as his/her own control. Responses to multiple-choice, knowledge questions and a self-efficacy confidence question were analyzed. A 95% binomial exact test was used to determine statistical significance. Effectiveness was evaluated using Cohen’s d (effect size).
The objective of this study was to compare students' perceptions of their school's ID antibiotic stewardship programs in response to the 2016 Joint Commission standard. Pharmacists have a central role in infectious diseases (ID) and antibiotic stewardship efforts across multiple healthcare settings. The demand for pharmacists to fill ID and stewardship-related careers will likely increase as institutions create antibiotic stewardship programs in response to the 2016 Joint Commission standard. The objective of this study was to compare students' perceptions of their school's ID curriculum between students interested in an ID career and those who are not. A cross-sectional survey study of students graduating from US pharmacy schools was conducted in September 2017. Students received the survey link from the ID faculty at participating schools. Results. Five hundred thirty-seven students from 28 pharmacy schools completed surveys. Quality of ID didactic education was rated as Very Good by 220 (41%), Good by 219 (40%), Acceptable by 76 (14%), and Poor by 22 (4%) respondents. The most common career interests were ambulatory care (44%), community practice (38%), and infectious diseases (29%). The most common preferred practice settings for students with an interest in ID (n = 157) were outpatient/inpatient (86%), inpatient stewardship (70%), and inpatient ID consult service (66%). Differences in responses about didactic ID education between students interested in an ID career and those not interested included: perception of education as Very Good (52% vs. 37%, P = 0.005), faculty providing handouts and/or worksheets (89% vs. 82%, P = 0.009), and the desire for more time allocated to antibiotic stewardship (47% vs. 31%, P < 0.001). Multivariate logistic regression found variables to be predictive of pharmacy student interest in an ID career including: pharmacy school (OR 3.7, 95% CI 2.4–5.9), perception of a Very Good didactic ID education (52% vs. 37%, P = 0.001). Multivariate logistic regression found variables to be predictive of pharmacy student interest in an ID career including: pharmacy school (OR 3.7, 95% CI 2.4–5.9), perception of a Very Good didactic ID education (52% vs. 37%, P = 0.001). Participation in this online educational intervention significantly improved ID specialists' knowledge with regard to the key similarities and differences between agents in the CABC antibiotic pipeline and the potential role of these agents in patient care. These findings highlight the positive impact of well-designed online education.

Methods. A prospective study of CPG implementation for treatment in adult in-patients who had DFIs was conducted at surgical and orthopedics wards. The CPG was developed by the investigator team based on the data from our previous study (submitted to publish). CPG was presented monthly to train the orthopedic and vascular surgeons for 1 year. The empirical ATB regimens were prescribed by the resident surgeon who was trained to use CPG. Demographics data, wound characteristics, microbiological data, ATB therapy, and clinical outcome were recorded. The appropriate empirical ATB treatment was determined by investigators whether CPG matched or microbiological data matched. The adherence to CPG, the appropriate empirical ATB, and the unfavorable outcomes were analyzed. All results were reported by descriptive and inferential statistics.

Results. A total of 85 DFIs patients were enrolled. The patients received the appropriate empirical ATB matched to CPG and matched to microbiological data, were 87% and 67%, respectively. The unfavorable outcome was 26% while previously was 72.4% (submitted to publish data) before CPG implementation. The independent factors associated with unfavorable outcomes were (1) an inappropriate ATB and (2) infections with drug-resistant pathogens (adjusted relative ratio aRR 2.98; 95% CI: 1.36–6.55, P = 0.007 and aRR 1.90; 95% CI: 1.05–3.45, P = 0.034, respectively).

Conclusion. The current study demonstrated that monthly training of CPG resulting in the high adherence (87%) of CPG use and resulting in high rate of appropriate empirical ATB. Educational intervention insisted the responsible physician for administration the appropriate ATB with the improvement of unfavorable outcome in DFIs.

Disclosures. All authors: No reported disclosures.

1308. Predictors of Career Interest in Infectious Diseases Among US Pharmacy Students

Meghan Jeffres, PharmD1; Lauren Biehle, PharmD, BCPSc1; and Conan MacDougal, PharmD, MAX, BCPSc2

Department of Clinical Pharmacy, University of Colorado Skaggs School of Pharmacy, Aurora, Colorado; and University of Wyoming School of Pharmacy, Laramie, Wyoming.

Session: 143. Medical Education

Friday, October 5, 2018: 12:30 PM

Background. Pharmacists have a central role in infectious diseases (ID) and antibiotic stewardship efforts across multiple healthcare settings. The demand for pharmacists to fill ID and stewardship-related careers will likely increase as institutions create antibiotic stewardship programs in response to the 2016 Joint Commission standard. The objective of this study was to compare students' perceptions of their school's ID curriculum between students interested in an ID career and those who are not. A cross-sectional survey study of students graduating from US pharmacy schools was conducted in September 2017. Students received the survey link from the ID faculty at participating schools. Results. Five hundred thirty-seven students from 28 pharmacy schools completed surveys. Quality of ID didactic education was rated as Very Good by 220 (41%), Good by 219 (40%), Acceptable by 76 (14%), and Poor by 22 (4%) respondents. The most common career interests were ambulatory care (44%), community practice (38%), and infectious diseases (29%). The most common preferred practice settings for students with an interest in ID (n = 157) were outpatient/inpatient (86%), inpatient stewardship (70%), and inpatient ID consult service (66%). Differences in responses about didactic ID education between students interested in an ID career and those not interested included: perception of education as Very Good (52% vs. 37%, P = 0.005), faculty providing handouts and/or worksheets (89% vs. 82%, P = 0.009), and the desire for more time allocated to antibiotic stewardship (47% vs. 31%, P < 0.001). Multivariate logistic regression found variables to be predictive of pharmacy student interest in an ID career including: pharmacy school (OR 3.7, 95% CI 2.4–5.9), perception of a Very Good didactic ID education (52% vs. 37%, P = 0.001). Multivariate logistic regression found variables to be predictive of pharmacy student interest in an ID career including: pharmacy school (OR 3.7, 95% CI 2.4–5.9), perception of a Very Good didactic ID education (52% vs. 37%, P = 0.001). Participation in this online educational intervention significantly improved ID specialists' knowledge with regard to the key similarities and differences between agents in the CABC antibiotic pipeline and the potential role of these agents in patient care. These findings highlight the positive impact of well-designed online education.

Methods. A prospective study of CPG implementation for treatment in adult in-patients who had DFIs was conducted at surgical and orthopedics wards. The CPG was developed by the investigator team based on the data from our previous study (submitted to publish). CPG was presented monthly to train the orthopedic and vascular surgeons for 1 year. The empirical ATB regimens were prescribed by the resident surgeon who was trained to use CPG. Demographics data, wound characteristics, microbiological data, ATB therapy, and clinical outcome were recorded. The appropriate empirical ATB treatment was determined by investigators whether CPG matched or microbiological data matched. The adherence to CPG, the appropriate empirical ATB, and the unfavorable outcomes were analyzed. All results were reported by descriptive and inferential statistics.

Results. A total of 85 DFIs patients were enrolled. The patients received the appropriate empirical ATB matched to CPG and matched to microbiological data, were 87% and 67%, respectively. The unfavorable outcome was 26% while previously was 72.4% (submitted to publish data) before CPG implementation. The independent factors associated with unfavorable outcomes were (1) an inappropriate ATB and (2) infections with drug-resistant pathogens (adjusted relative ratio aRR 2.98; 95% CI: 1.36–6.55, P = 0.007 and aRR 1.90; 95% CI: 1.05–3.45, P = 0.034, respectively).

Conclusion. The current study demonstrated that monthly training of CPG resulting in the high adherence (87%) of CPG use and resulting in high rate of appropriate empirical ATB. Educational intervention insisted the responsible physician for administration the appropriate ATB with the improvement of unfavorable outcome in DFIs.

Disclosures. All authors: No reported disclosures.

1309. The Impact of Clinical Practice Guideline Using Educational Intervention for Improvement of Diabetic Foot Infections Treatment Outcomes

Mallika Phangmuangdee, MD1; Voravuth Navasak, MD1; and Porpan Koomanachai, MD1

Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand.

Session: 143. Medical Education

Friday, October 5, 2018: 12:30 PM

Background. Diabetic foot infections (DFIs) are important cause of lower-extremity amputation. The inappropriate empirical antimicrobial therapy for DFI was associated with amputation. We created the Clinical Practice Guideline (CPG) of empirical antimicrobial (ATB) therapy for in-patients with DFIs. The primary outcome of present study was to evaluate the intervention using educate and training the surgeons to adhere with CPG. The secondary outcome was the decreasing of unfavorable outcomes (amputations).

Methods. A prospective study of CPG implementation for treatment in adult in-patients who had DFIs was conducted at surgical and orthopedics wards. The CPG was developed by the investigator team based on the data from our previous study (submitted to publish). CPG was presented monthly to train the orthopedic and vascular surgeons for 1 year. The empirical ATB regimens were prescribed by the resident surgeon who was trained to use CPG. Demographics data, wound characteristics, microbiological data, ATB therapy, and clinical outcome were recorded. The appropriate empirical ATB treatment was determined by investigators whether CPG matched or microbiological data matched. The adherence to CPG, the appropriate empirical ATB, and the unfavorable outcomes were analyzed. All results were reported by descriptive and inferential statistics.

Results. A total of 85 DFIs patients were enrolled. The patients received the appropriate empirical ATB matched to CPG and matched to microbiological data, were 87% and 67%, respectively. The unfavorable outcome was 26% while previously was 72.4% (submitted to publish data) before CPG implementation. The independent factors associated with unfavorable outcomes were (1) an inappropriate ATB and (2) infections with drug-resistant pathogens (adjusted relative ratio aRR 2.98; 95% CI: 1.36–6.55, P = 0.007 and aRR 1.90; 95% CI: 1.05–3.45, P = 0.034, respectively).

Conclusion. The current study demonstrated that monthly training of CPG resulting in the high adherence (87%) of CPG use and resulting in high rate of appropriate empirical ATB. Educational intervention insisted the responsible physician for administration the appropriate ATB with the improvement of unfavorable outcome in DFIs.

Disclosures. All authors: No reported disclosures.

S400 • OFID 2018:5(Suppl 1) • Poster Abstracts