2022. Antibiotic Prescribing Behavior Among Surgeon Anucha Apisarnthanarak, MD; Kittiya Janarataneewat, PharmD; Sirindhorn Chansiriporn, MD; Nattapon Tidwong, PharmD; Linda Mundy, MD, PhD; Thammastat University Hospital, Pathum Thani, Thailand; 1Bryn Mawr, Pennsylvania, Pennsylvania

Session: 236. Antibiotic Stewardship: Global Saturday, October 5, 2019: 12:15 PM

Background. A comparative study was conducted to evaluate prescribed anti-
biotic (AB) use in surgical patients with the Transtheoretical Model of Behavior (TTM) and Theory of Planned Behavior (TPB).

Methods. A survey was conducted at Thammastat University Hospital from January 1 to 31, 2019. We evaluated the appropriateness of AB uses in the surgical department reported performed by the hospital’s Drug Use Evaluation (DUE) form. After review of the DUE, in-depth interviews were conducted to all prescribers to explore antibiotic prescribing behavior based on TTM vs. TPB, using a standardized data collection tool. Data collected included demographics, indications, appropriateness of AB uses, the individual prescriber’s behavior based on TTM and TPB. The five TTM stages of change were categorized precontemplation, contemplation, preparation, action, and maintenance. In TPB assessment, we evaluated attitude toward AB uses, subjective norm to AB uses behavior, and perceived behavior control of AB uses behavior.

Results. There were 92 AB uses from 64 prescribers; 70 (70/92; 76%) used antibiotics appropriately. The majority of AB uses (62/92; 67%) were for treatment of infections. The most common reasons for inappropriate AB uses included inappropriate AB choices for treatment and prophylaxis of SSIs (n = 11, 50%) and inappropriate duration (n = 8, 36%). Physicians categorized in higher stages of TTM (action and maintenance) were strongly correlated with appropriate AB uses, while there was no correlation between the total TPRP and appropriateness of AB uses. By multivariate analysis, the TTM stage of maintenance (aOR = 7.95; P = 0.02) and self-reported prescribers who considered patients as first priority (aOR = 4.02; P = 0.04) were associated with appropriate AB uses, while neuropsychological procedures (aOR = 0.13; P = 0.003) and antibiotic prescriptions for surgical prophylaxis (aOR = 0.15; P = 0.003) were associated with inappropriate AB uses.

Conclusion. Antibiotic prescribers categorized by TTM stages strongly correlated with appropriate AB uses. Additional studies to assess appropriate AB prescribing behavior, based on TTM stages of change, offer an opportunity to optimize surgical care.

Disclosures. All authors: No reported disclosures.

2023. Antimicrobial Resistance and Stewardship Knowledge and Perception among Medical and Pharmacy Students in Nigeria Chukwuemeaka Michael Ubaaka, PhD1; Natalie Schellack, PhD2; Benedict Nwomeh, MD, MPH1; Debra A. Goff, PharmD; University of Nigeria, Nsukka, Enugu, Nigeria; 1Seoko Makgatho Health Sciences University, Medunsa, Gauteng, South Africa; 3National Children’s Hospital, Columbus, Ohio; 1,2,3The Ohio State University Wexner Medicine Center, Columbus, Ohio

Session: 236. Antibiotic Stewardship: Global Saturday, October 5, 2019: 12:15 PM

Background. Nigeria is the most populous country in Africa and has high rates of antimicrobial resistance (AMR). The practice of antimicrobial stewardship in Nigerian hospitals is very limited and the subject is rarely included in undergraduate medical and pharmacy curriculums. To further acceptance and implementation of antimicrobial stewardship programs (ASP) in Nigerian health system, baseline measure- ments of the knowledge and perceptions held by graduating medical and pharmacy students was deemed essential. This study evaluated the knowledge and perceptions of a cohort of Nigerian medical and pharmacy students in concepts of AMR and ASP.

Methods. This was a cross-sectional questionnaire-based study of final year medical and pharmacy students from the two largest schools in the southeastern region of Nigeria. A previously published 20-items questionnaire measuring knowledge and perceptions toward AMR and ASP was adopted for the study. Results were expressed in frequencies and percentages.

Results. Completed questionnaires were received from 79.3% (361 of 455 stu-
dents), over half (60%) were male, and mostly between 22 and 25 years old (68.7%). More pharmacy students had formal training on ASP compared with medical students (41.3% vs. 27.5%, P < 0.05). Pharmacy students (n = 84.3% and 90.5%) were signific-
tly more knowledgeable of factors that promote the spread of AMR and interven-
tions to combat resistance than medical students (n = 73.9% and 82.3%), P < 0.05, respectively. Interestingly, 23.3% of medical students thought pharmacists should lead ASP teams, while 5.8% of pharmacy students thought doctors should lead ASP. Physicians on general principles of AS, then guidelines for the management of “dif-
ficult-to-handle” infections during the intervention period was observed (changes in the proportion of appropriate prescription was 0.37 [P < 0.01] and 0.51 [P < 0.01], respectively).

Conclusion. Antimicrobial resistance (AMR) situation in Italian hospitals and regions represents a major public health threat [ECDC, 2017]. Antimicrobial stewardship programs (ASPs), particularly when based on local epidemiology, have been beneficial in optimizing antibiotic therapy as well as reducing hospital rates of Clostridium difficile infection (CDI) and AMR [Apkan MB, Antibiotics 2016].

Disclosures. All authors: No reported disclosures.

2025. Evaluation of the Impact of an Antimicrobial Stewardship Program in a Tertiary Hospital in Northern Italy: Efficacy of a Persuasive Approach on Antibiotics Consumption and Rate of Clostridium difficile Infection Erika Chiari, MD; Davide Mangioni, MD;1,2; Arnaldo Bertelli, MD;1; Giovanna Moioli, MD;1; Giuseppe Pararinto, MD;1; Evelyn Van Hauwermeiren, MD; Barbara Saccani, MD; Davide Bertelli, MD;2; Elena Festa, Pharmacist1; Armando Caruso, MD; Roberta Stellini, MD; Francesco Castelli, MD;1,2; Infectious Diseases Unit, Department of Internal Medicine, Fondazione IRCCS Ca Grandi Ospedale Maggiore Policlinico, Milan, Italy; Infectious Diseases Unit, Department of Internal Medicine, Fondazione IRCCS Ca Grandi Ospedale Maggiore Policlinico, Brescia, Lombardia, Italy; Department of Microbiology and Virology, Spedali Civili, Brescia, Italy

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Background. Antimicrobial (AMR) situation in Italian hospitals and regions represents a major public health threat [ECDC, 2017]. Antimicrobial stewardship programs (ASPs), particularly when based on local epidemiology, have been beneficial in optimizing antibiotic therapy as well as reducing hospital rates of Clostridium difficile infection (CDI) and AMR [Apkan MB, Antibiotics 2016].

Methods. Our ASP program has been conducted at Spedali Civili General Hospital of Brescia, Northern Italy (1300-bed tertiary hospital), between the begin-
ing of 2016 and the end of 2017. A preliminary analysis of local epidemiological data was performed (Table 1). Seven groups (“districts”) were identified according to micro-
biological and clinical similarities. This was a persuasive-based ASP. First, we trained physicians on general principles of AS, then guidelines for the management of “dif-
cult-to-handle” infections were drafted based on international guidelines and local microbiological data (Table 2).

Results. Here we show the results of pre-ASP (2015) vs. post-ASP (2018) analysis on antibiotic consumption (AC) and CDI rates. AC is expressed in DDD/100 bed-days. The overall hospital AC decreased from 84.31 to 76.81 (−9%), consistently with national rec-
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