SSI incidents and optimized the power to predict SSI through pattern recognition algorithms based on support vector machines (SVMs). **Methods:** Data were collected on SSIs at 5 different hospitals. The hospital infection control committees (CCIHs) of the hospitals collected all data used in the analysis during their routine SSI surveillance procedures; these data were sent to the NOIS (Nosocomial Infection Study) Project. NOIS uses SACIH software (an automated hospital infection control system) to collect data from hospitals that participate voluntarily in the project. In the NOIS, 3 procedures were performed: (1) a treatment of the database collected for use of intact samples; (2) a statistical analysis on the profile of the hospitals collected; and (3) an assessment of the predictive power of SVM with a nonlinear separation process varying in configurations including kernel function (Laplace, Radial Basis, Hyperbolic Tangent and Bessel) and the k-fold cross-validation–based resampling process (ie, the use of data varied according to the amount of folders that cross and combine the evaluated data, being k = 3, 5, 6, 7, and 10). The data were compared by measuring the area under the curve (AUC; range, 0–1) for each of the configurations. **Results:** From 13,383 records, 7,565 were usable, and SSI incidence was 2.0%. Most patients were aged 35–62 years; the average duration of surgery was 101 minutes, but 76% of surgeries lasted >2 hours. The mean hospital length of stay without SSI was 4 days versus 17 days for the SSI cases. The survey data showed that even with a low number of SSI cases, the prediction rate for this specific surgery was 0.74, which was 14% higher than the rate reported in the literature. **Conclusions:** Despite the high noise index of the database, it was possible to sample relevant data for the evaluation of general surgery patients. For the predictive process, our results were >0.50 and were 14% better than those reported in the literature. However, the database requires more SSI case samples because only 2% of positive samples unbalanced the database. To optimize data collection and to enable other hospitals to use the SSI prediction tool, a mobile application was developed (available at www.sacihweb.com).

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Prescribing Pattern of Antibiotics among Children in a Tertiary-Care Hospital, Bangladesh

Sukanta Chowdhury, ICCDR,B; Rajib Sarker, Patuakhali Science and Technology University, Bangladesh; Md. Shafiqul Islam Khan, Patuakhali Science and Technology University, Bangladesh; Probir Kumar Ghosh, ICCDR,B; Md. Abu Tareq, Patuakhali Science and Technology University, Bangladesh; Musammet Rasheda Begum, Chattogram Veterinary and Animal Sciences University, Bangladesh

Background: The inappropriate and irrational use of antibiotics both in humans and animals causes bacterial resistance. Bacterial resistance is common in low- and middle-income countries, including Bangladesh. Bangladesh has very limited information on antibiotic use and associated resistance. We sought to better understand antibiotic use in low-resource settings for the development of effective strategies to address inappropriate antibiotic use. **Methods:** We conducted a cross-sectional study among hospitalized children <5 years of age in a tertiary-care hospital in Barishal, Bangladesh, to collect data on antibiotic use. We collected data from 400 children during February–April 2019. **Results:** Among these 400 children, >50% were aged <1 year, and >60% of these children were boys. The average hospital stay was 3 days (range, 1–14). Most of the children had history of diarrhea and 18% had pneumonia. Most children (82%) were prescribed antibiotics. A combined form of antibiotics was prescribed for 17% of these children. In total, 14 different antibiotics were used. The most commonly used antibiotic was ceftriaxone (57%) followed by azithromycin (14%). The parental route was mostly preferred (75%) for antibiotic administration. **Conclusions:** Antibiotic prescription was common in children aged <5 years visiting a tertiary-care hospital. Most of the prescribed antibiotics were broad spectrum, which can promote bacterial resistance. Further studies are needed to identify the factors associated with overuse of antibiotics and bacterial resistance in low-resource settings.

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Prevalence and Carbapenem Resistance of *Acinetobacter baumannii* and Other Than *A. baumannii* Isolates From Intensive Care Units (ICUs) and non-ICUs

Tomasz Kasperski, Biophage Pharma S.A., Kraków; Agnieszka Chmielarczyk, Jagiellonian University Collegium Medicum; Monika Pomorska-Wesołowska, Analytical and Microbiological Laboratory of Ruda Slaska KORLAB; Dorota Romaniszyn, Jagiellonian University Medical School; Jadwiga Wojkowska-Mach, Jagiellonian University Medical School

Background: *Acinetobacter* spp are gram-negative bacteria that have emerged as a leading cause of hospital-associated infections, most often in the intensive care unit (ICU) setting. This is particularly important in Poland, where the prevalence of *A. baumannii* in various types of infections, including bloodstream infection (BSI), pneumonia, skin and soft-tissue infection (SSTI), and urinary tract infection (UTI) is higher than in neighboring countries. Recently, other *Acinetobacter* spp, including *A. lwoffii* or *A. ursingii*, have been found to be clinically relevant. In Poland, we have also observed a very rapid increase in antimicrobial resistance, significantly faster for *A. baumannii* than for other nosocomial pathogens. **Methods:** A study was conducted in 12 southern Polish hospitals, including 3 ICUs, from January 1 to December 31, 2018. Only adult hospitalized patients were included. Strains were identified using the MALDI-TOF method. Carbapenem resistance was determined using the minimum inhibitory concentration (MIC). **Results:** During the study, 194 strains belonging to the *Acinetobacter* genus were isolated. *A. baumannii* was the dominant species, 88.1% (n = 171), and 23 isolates (11.9%) were other *Acinetobacter* spp: *A. ursingii* (n = 5), *A. lwofii* (n = 4), *A. haemolyticus* (n = 4), *A. junii* (n = 3), *A. radioresistens* (n = 2), *A. bereziniae* (n = 2), and *A. johnsonii* (n = 2). Moreover, 15 *Acinetobacter* strains were collected from ICUs. The most *Acinetobacter* strains were isolated from SSTIs (n = 115) from non-ICU settings. Non–*A. baumannii* strains were also most frequently isolated from SSTIs; they constituted 11.3% of all *Acinetobacter* strains from this type of infection (n = 13). The total *Acinetobacter* prevalence was 2.6%, whereas the prevalence in the ICU setting was 7%. *Acinetobacter* prevalence in SSTIs was 10.4%. In pneumonia, *Acinetobacter* prevalence was 18.6% for ICUs (n = 13) and 2.7% for non-ICUs (n = 46). Strains from UTIs were isolated only with the non-ICU setting, and their prevalence was 0.7% (n = 14). More