Implementation of antimicrobial stewardship in inpatient and outpatient settings

Karisma Patel
Children’s Mercy Hospital, USA

Antibiotic resistance is currently one of the greatest global public health concerns. Antimicrobial stewardship (ASP) has been gaining regulatory interests in an effort to slow the spread of antibiotic resistance and improve antibiotic-related patient safety outcomes. Effective January 1, 2017, The Joint Commission implemented a Medication Management standard of practice for ASP. Additionally, the Centers for Medicare & Medicaid Services has a pending Condition of Participation on ASP and the White House’s Action Plan includes the establishment of ASP programs in all acute care hospitals and improved ASP across all healthcare settings by 2020. In 2016, IDSA and SHEA released new guidelines that focus on the implementation of an effective antimicrobial stewardship program. Strategies such as preauthorization or prospective audit and feedback, development of clinical practice guidelines for common infectious diseases syndromes and incorporation of rapid diagnostic testing have been shown to be highly effective. Other recommendations include the use of antibiotic time-outs and utilization of clinical decision support tools. Hospitals and nursing homes have been the primary focus of ASP implementation guidelines; however, a majority of antibiotic prescribing occurs in the outpatient setting, where an estimated 50% of written prescriptions are inappropriate or unnecessary. In November 2016, the Centers for Disease Control and Prevention published the core elements of outpatient ASP to provide guidance for ASP in outpatient clinicians and facilities. The four elements include commitment, action for policy and practice, tracking and reporting and education and expertise. Establishing effective antibiotic stewardship interventions can protect patients and improve clinical outcomes in both inpatient and outpatient health care settings.

Speaker Biography

Karisma Patel is a Clinical Pharmacist of Pediatric Infectious Diseases at Children’s Mercy Hospital, USA. She has completed her Doctorate of Pharmacy at the University of Louisiana at Monroe College of Pharmacy. She subsequently completed a Pediatric Pharmacy Practice Residency followed by a Pediatric Infectious Diseases/Antimicrobial Stewardship Pharmacy Residency at Arkansas Children’s Hospital and the University of Arkansas for Medical Sciences College of Pharmacy. Her current research interests include the role of antimicrobial stewardship in decreasing antibiotic resistance and clinical outcomes, optimization of Vancomycin dosing and therapeutic drug monitoring and the clinical utility of infectious biomarkers to aid antimicrobial stewardship activities.

e: kbpatel@cmh.edu