ABR-Scan Science Week 24-25

Unit for Antibiotics and Infection Control

This ABR-Scan Science is compiled by the Unit for Antibiotics and Infection Control at the Public Health Agency of Sweden. It includes a summary of links to recent articles from a selection of 17 scientific journals that we find interesting. All journals included in the scan are listed at the bottom of the document. The articles are sorted according to our categorization: surveillance, treatment and diagnosis, prevention and intervention, microbiology and other. Please send an e-mail to ABR-scan@folkhalsomyndigheten.se if you would like to unsubscribe, manage your subscription or submit any comments or suggestions.

Surveillance

National disparities in the relationship between antimicrobial resistance and antimicrobial consumption in Europe: an observational study in 29 countries. <u>Journal of Antimicrobial Chemotherapy</u>

Effects of Sexual Network Connectivity and Antimicrobial Drug Use on Antimicrobial Resistance in Neisseria gonorrhoeae. Emerging Infectious Diseases

Prospective study on antimicrobial resistance in leprosy cases diagnosed in France from 2001 to 2015. Clinical Microbiology and Infection

Predictors of one-year all-cause mortality and infection-related mortality in patients with *Staphylococcus aureus* bacteraemia. <u>Infectious Diseases</u>

Reducing demand for antibiotic prescriptions: evidence from an online survey of the general public on the interaction between preferences, beliefs and information, United Kingdom, 2015.

<u>Eurosurveillance</u>

Mapping national surveillance of surgical site infections (SSIs) to national needs and priorities: an assessment of England's surveillance landscape. <u>Journal of Hospital Infection</u>

A Nosocomial Foodborne Outbreak of a VIM Carbapenemase-Expressing *Citrobacter freundii*. Clinical Infectious Diseases

Dentists' prescribing of antibiotics and opioids to Medicare Part D beneficiaries: Medications of high impact to public health. <u>Journal of the American Dental Association</u>

Notes from the Field: Carbapenemase-Producing Carbapenem-Resistant Enterobacteriaceae from Less Common Enterobacteriaceae Genera — United States, 2014–2017. Emerging Infectious Diseases

Management and Outcomes of Staphylococcus aureus Bacteraemia at a South African Referral Hospital: A Prospective Observational Study. <u>International Journal of Infectious Diseases</u>

A systematic review on the use of time series data in the study of antimicrobial consumption and Pseudomonas aeruginosa resistance. Journal of Global Antimicrobial Resistance

Paediatric antimicrobial use at a South African hospital. International Journal of Infectious Diseases

Prevalence, trend and antimicrobial susceptibility of Methicillin Resistant Staphylococcus aureus in Nigeria: a systematic review. <u>Journal of Infection and Global Health</u>

Use of data on antibiotic use as indicators for detecting clusters of healthcare-associated infection caused by multidrug-resistant organisms in a hospital in China, 2014 to 2017. <u>Journal of Hospital Infection</u>

Microorganisms resistant to conventional antimicrobials in acute exacerbations of chronic obstructive pulmonary disease. BMC Respiratory Research

Antimicrobial sensitivity trends and virulence genes in Shigella spp. from the Oceania region. Infection, Genetics and Evolution

Clinical and microbiological characteristics of peritoneal dialysis-related peritonitis caused by Escherichia coli in southern Taiwan. European Journal of Clinical Microbiology & Infectious Diseases

Fecal carriage of multidrug-resistant *Escherichia coli* by community children in southern Taiwan. BMC Gastroeneterology

High mortality among patients infected with hypervirulent antimicrobial-resistant capsular type K1 Klebsiella pneumoniae strains in Taiwan. International Journal of Antimicrobial Agents

Treatment and diagnosis

Clinical effectiveness of carbapenems versus alternative antibiotics for treating ESBL-producing Enterobacteriaceae bacteraemia: a systematic review and meta-analysis. <u>Journal of Antimicrobial Chemotherapy</u>

Evaluation of apramycin activity against methicillin-resistant, methicillin-sensitive, and vancomycin-intermediate *Staphylococcus aureus* clinical isolates. <u>Diagnostic Microbiology and Infectious Disease</u>

The Clinical Utility of Methicillin-Resistant *Staphylococcus aureus* (MRSA) Nasal Screening to Rule Out MRSA Pneumonia: A Diagnostic Meta-analysis With Antimicrobial Stewardship Implications. Clinical Infectious Diseases

The Use of Serum Procalcitonin as a Diagnostic and Prognostic Biomarker in Chronic Obstructive Pulmonary Disease Exacerbations: A Literature Review Update. <u>Journal of Clinical Medicine</u>
Research

Extended-pulsed fidaxomicin versus vancomycin for *Clostridium difficile* infection in patients aged ≥60 years (EXTEND): analysis of cost-effectiveness. <u>Journal of Antimicrobial Chemotherapy</u>

Anaerobic coverage as definitive therapy does not affect clinical outcomes in community-onset bacteremic biliary tract infection without anaerobic bacteremia. BMC Infectious Diseases

Frequency of Treatment Switching for Spironolactone Compared to Oral Tetracycline-Class Antibiotics for Women With Acne: A Retrospective Cohort Study 2010-2016. <u>Journal of Drugs in Dermatology</u>

Have we realized the full potential of β-lactams for treating drug-resistant TB? IUBMB Life

Prevention and intervention

Impact of a stewardship-focused culture follow-up initiative on the treatment of pharyngitis in the emergency department and urgent care settings. <u>Diagnostic Microbiology and Infectious Disease</u>

Outcomes associated with the use of a revised risk assessment strategy to predict antibiotic resistance in community-onset pneumonia: a stewardship perspective. <u>Journal of Antimicrobial Chemotherapy</u>

Quality indicators for responsible antibiotic use in the inpatient setting: a systematic review followed by an international multidisciplinary consensus procedure. <u>Journal of Antimicrobial</u> Chemotherapy

Quality indicators assessing antibiotic use in the outpatient setting: a systematic review followed by an international multidisciplinary consensus procedure. <u>Journal of Antimicrobial Chemotherapy</u>

Opportunities to Improve Fluoroquinolone Prescribing in the United States for Adult Ambulatory Care Visits. Clinical Infectious Diseases

Improved empirical antibiotic treatment of sepsis after an educational intervention: the ABISS-Edusepsis study. <u>Critical Care</u>

Antimicrobial Stewardship in Long-Term Care Facilities: Approaches to Creating an Antibiogram when Few Bacterial Isolates Are Cultured Annually. <u>Journal of the American Medical Directors Association</u>

Stand-by antibiotics encourage unwarranted use of antibiotics for travelers' diarrhea: A prospective study. <u>Travel Medicine and Infectious Disease</u>

High-risk Staphylococcus aureus transmission in the operating room: A call for widespread improvements in perioperative hand hygiene and patient decolonization practices. <u>American Journal of Infection Control</u>

Microbiology

Exploring the multi-drug resistance in Escherichia coli O157:H7 by gene interaction network: A systems biology approach. Genomics

Characterization and Transcriptome Analysis of Acinetobacter baumannii Persister Cells. <u>Microbial Drug Resistance</u>

Other

Experiences and consequences of living with extended-spectrum β -lactamase-producing bacteria: A qualitative study. <u>American Journal of Infection Control</u>

Not a magic pill: a qualitative exploration of provider perspectives on antibiotic prescribing in the outpatient setting. BMC Family Practice

Revitalizing the drug pipeline: AntibioticDB, an open access database to aid antibacterial research and development. <u>Journal of Antimicrobial Chemotherapy</u>

Towards a global definition of responsible antibiotic use: results of an international multidisciplinary consensus procedure. <u>Journal of Antimicrobial Chemotherapy</u>

The publications included in the scan are: Antimicrobial Agents and Chemotherapy, British Medical Journal, Clinical Infectious Diseases, Clinical Microbiology and Infection, Emerging Infectious Diseases, Eurosurveillance, Infection Control & Hospital Epidemiology, Infectious Diseases, JAMA - The Journal of the American Medical Association, Journal of Antimicrobial Chemotherapy, Journal of Hospital Infection, Journal of Infectious Diseases, Lancet, Lancet Infectious Diseases, New England Journal of Medicine, Pediatrics and Scandinavian Journal of Primary Health Care. In addition, other articles from other publications can be included.