ABR-Scan Science Week 44

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. If you have any comments or suggestions, please send an e-mail to ABR-scan@folkhalsomyndigheten.se

Surveillance

AMR Surveillance in low and middle-income settings - A roadmap for participation in the Global Antimicrobial Surveillance System (GLASS). Wellcome Open Research

Risk factors for resistance and MDR in community urine isolates: population-level analysis using the NHS Scotland Infection Intelligence Platform. Journal of Antimicrobial Chemotherapy

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

Emergence of *mcr-1* and carbapenemase genes in hospital sewage water in Beijing, China. <u>Journal</u> of Antimicrobial Chemotherapy

The ClosER Study: results from a three-year pan-European longitudinal surveillance of antibiotic resistance among prevalent Clostridium difficile ribotypes, 2011–2014. Clinical Microbiology and Infection

Extended-spectrum β-lactamase/AmpC- and carbapenemase-producing *Enterobacteriaceae* in animals: a threat for humans? <u>Clinical Microbiology and Infection</u>

VIM-1 carbapenemase-producing Escherichia coli isolated from retail seafood, Germany 2016. Eurosurveillance

Strengthening Global Surveillance for Antimicrobial-Resistant Neisseria gonorrhoeae through the Enhanced Gonococcal Antimicrobial Surveillance Program (EGASP). Emerging Infectious Diseases

Increases in *Neisseria gonorrhoeae* with Reduced Susceptibility to Azithromycin among Men who have sex with Men (MSM), in Seattle, King County, Washington: 2012 – 2016. <u>Clinical Infectious</u> Diseases

Prevalence of drug-resistant pulmonary tuberculosis in India: systematic review and meta-analysis. BMC Public Health

Drug-Resistant Tuberculosis among Children, China, 2006–2015. Emerging Infectious Diseases

Review of antimicrobial resistance surveillance programmes in livestock and their meat in Europe, with a focus on antimicrobial resistance patterns in humans. Clinical Microbiology and Infection

Identifying hospital-onset Escherichia coli bacteraemia cases from English mandatory surveillance: the case for applying a two-day post-admission rule. Journal of Hospital Infection

Treatment and diagnosis

Is a randomized trial of a short course of aminoglycoside added to beta lactam antibiotics for empirical treatment in critically ill patients with sepsis justified? Clinical Microbiology and Infection

Comparative efficacy and safety of treatment options for MDR and XDR *Acinetobacter baumannii* infections: a systematic review and network meta-analysis. <u>Journal of Antimicrobial Chemotherapy</u>

Potential of high-dose cefepime/tazobactam against multiresistant Gram-negative pathogens. Journal of Antimicrobial Chemotherapy

Prospective evaluation of a continuous infusion vancomycin dosing nomogram in critically ill patients undergoing continuous venovenous haemofiltration. <u>Journal of Antimicrobial</u> Chemotherapy

Ceftazidime/avibactam use for carbapenem-resistant *Klebsiella pneumoniae* meningitis: a case report. Journal of Antimicrobial Chemotherapy

Efficacy and safety of delafloxacin compared with vancomycin plus aztreonam for acute bacterial skin and skin structure infections: a Phase 3, double-blind, randomized study. <u>Journal of Antimicrobial Chemotherapy</u>

Interventions Targeting the Prescribing and Monitoring of Vancomycin for Hospitalized Patients: A Systematic Review Protocol. <u>Infectious Diseases Therapy</u>

Prevention and intervention

Discontinuing contact precautions for multidrug-resistant organisms: A systematic literature review and meta-analysis. American Journal of Infection Control

Description of a restriction program for gram-positive antimicrobial agents at an academic medical center. American Journal of Infection Control

Impact of requiring re-authorization of restricted antibiotics on day 3 of therapy. <u>Journal of</u> Antimicrobial Chemotherapy

Antibiotic stewardship: does it work in hospital practice? A review of the evidence base. Clinical Microbiology and Infection

Antibiotic stewardship in low- and middle-income countries: the same but different? Clinical Microbiology and Infection

Good epidemiological practice: a narrative review of appropriate scientific methods to evaluate the impact of antimicrobial stewardship interventions. <u>Clinical Microbiology and Infection</u>

Provider Role in Transmission of Carbapenem-Resistant Enterobacteriaceae. <u>Infection Control & Hospital Epidemiology</u>

Determinants of Implementation of Isolation Precautions Against Infections by Multidrug-Resistant Microorganisms: A Hospital-Based, Multicenter, Observational Study. Infection Control & Hospital Epidemiology

The start of another infection prevention learning curve: reducing healthcare-associated Gramnegative bloodstream infections. <u>Journal of Hospital Infection</u>

The association between infection control interventions and carbapenem-resistant Enterobacteriaceae incidence in an endemic hospital. <u>Journal of Hospital Infection</u>

Antibiotic Stewardship in Nursing Facilities. <u>Infectious Disease Clinics of North America</u>

Microbiology

Colistin antimicrobial susceptibility testing – can the slow and challenging be replaced by the rapid and convenient? Clinical Microbiology and Infection

Antibiotic resistance of pathogenic Acinetobacter species and emerging combination therapy. Journal of Microbiology

Other

Pharmacodynamics of fosfomycin against ESBL- and/or carbapenemase-producing Enterobacteriaceae. Journal of Antimicrobial Chemotherapy

Metronidazole: an update on metabolism, structure—cytotoxicity and resistance mechanisms. Journal of Antimicrobial Chemotherapy

How do bacteriophages promote antibiotic resistance in the environment? <u>Clinical Microbiology</u> and Infection

New agents for the treatment of infections with Gram-negative bacteria: restoring the miracle or false dawn? <u>Clinical Microbiology and Infection</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.