ABR-Scan Science Week 4-5

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

WHO Global Antimicrobial Resistance Surveillance System early implementation 2016–17. <u>Lancet Infectious Diseases</u>

Prevalence of and factors associated with MDR Neisseria gonorrhoeae in England and Wales between 2004 and 2015: analysis of annual cross-sectional surveillance surveys. <u>Journal of Antimicrobial Chemotherapy</u>

Acquired Resistance to Antituberculosis Drugs in England, Wales, and Northern Ireland, 2000–2015. Emerging Infectious Diseases

Etiology and antimicrobial resistance patterns in pediatrics with urinary tract infections. Pediatrics International

How to: Surveillance of Clostridium difficile infections. Clinical Microbiology and Infection

Detection of antimicrobial resistance genes associated with the International Space Station environmental surfaces. <u>Scientific Reports</u>

Whole-Genome Analysis of Mycobacterium tuberculosis from Patients with Tuberculous Spondylitis, Russia. <u>Emerging Infectious Diseases</u>

Spread of carbapenem resistant Enterobacteriaceae at tertiary care cancer hospital in Egypt. Infectious Diseases

Artificial Differences in Clostridium difficile Infection Rates Associated with Disparity in Testing. Emerging Infectious Diseases

Clostridium difficile classification overestimates hospital acquired infections. <u>Journal of Hospital</u> Infection

Antimicrobial susceptibility pattern, and associated factors of Salmonella and Shigella infections among under five children in Arba Minch, South Ethiopia. <u>Annals of Clinical Microbiology and Antimicrobials</u>

Molecular analysis of multidrug resistance in clinical isolates of Shigella spp. from 2001–2010 in Kolkata, India: role of integrons, plasmids, and topoisomerase mutations. Infection and Drug Resistance

Antimicrobial resistance in companion animals. **Equine Veterinary Journal**

Treatment and diagnosis

Shorter Versus Longer Courses of Antibiotics for Infection in Hospitalized Patients: A Systematic Review and Meta-Analysis. <u>Journal of Hospital Medicine</u>

Association between use of different antibiotics and trimethoprim resistance: going beyond the obvious crude association. Journal of Antimicrobial Chemotherapy

Antibiotics for asymptomatic bacteriuria in kidney transplant recipients. Cochrane Library

A Review of Combination Antimicrobial Therapy for *Enterococcus Faecalis* Bloodstream Infections and Infective Endocarditis. Clinical Infectious Diseases

A shorter period of therapy is associated with higher mortality in bloodstream infections caused by carbapenemase-producing *Klebsiella pneumoniae* in a Brazilian centre. Infectious Diseases

Febrile urinary-tract infection due to extended-spectrum beta-lactamase-producing Enterobacteriaceae in children: A French prospective multicenter study. <u>PLoS One</u>

Empiric antibiotic therapy in urinary tract infection in patients with risk factors for antibiotic resistance in a German emergency department. <u>BMC Infectious Diseases</u>

A retrospective clinical comparison of daptomycin vs daptomycin and a beta-lactam antibiotic for treating vancomycin-resistant Enterococcus faecium bloodstream infections. Scientific Reports

Completion Rate and Safety of Tuberculosis Infection Treatment With Shorter Regimens. Pediatrics

Accuracy of the Urinalysis for Urinary Tract Infections in Febrile Infants 60 Days and Younger.

Pediatrics

Treatment duration for Escherichia coli bloodstream infection and outcomes: retrospective single centre study. Clinical Microbiology and Infection

Pharmacokinetic drug evaluation of avibactam + ceftazidime for the treatment of hospital-acquired pneumonia. Expert Opinion on Drug Metabolism & Toxicology

Rethinking Antimicrobial Prophylaxis in the Transplant Patient in the World of Emerging Resistant Organisms—Where Are We Today? Current Hematologic Malignancy Reports

Risk of nephrotoxicity among patients who received vancomycin. Infectious Diseases

Prevention and intervention

Clinical impact of delayed catheter removal for patients with central venous catheter-related gramnegative bacteremia. <u>Journal of Hospital Infection</u>

Preventing healthcare-associated gram-negative bloodstream infections. <u>Journal of Hospital Infection</u>

Optimization Of The Blood Culture Pathway: A Template For Improved Sepsis, Management And Diagnostic Antimicrobial Stewardship. <u>Journal of Hospital Infection</u>

A potential benefit from infectious disease specialist and stationary ward in rational antibiotic therapy of complicated skin and skin structure infections. <u>Infectious Diseases</u>

The effects of antibiotic cycling and mixing on antibiotic resistance in intensive care units: a cluster-randomised crossover trial. <u>Lancet Infectious Diseases</u>

Antibiotic strategies in critical care: back to square one? <u>Lancet Infectious Diseases</u>

Microbiology

Capsule Typing of Haemophilus influenzae by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry. <u>Emerging Infectious Diseases</u>

Other

Antibiotic resistance: are we living a nightmare? Clinical Microbiology and Infection

Human resources estimates and funding for antibiotic stewardship teams are urgently needed: authors' response. <u>Clinical Microbiology and Infection</u>

A colistin crisis in India. Lancet Infectious Diseases

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.