ABR-Scan Science Week 5-6

Unit for Antibiotics and Infection Control

This biweekly ABR-Scan is compiled by the Unit for Antibiotics and Infection Control at the Public Health Agency of Sweden (PHAS). It includes a summary of links to recent peer-reviewed articles mainly from a selection of 17 scientific journals, which are listed at the bottom of the document. The articles are sorted according to the following categories: surveillance, treatment and diagnosis, prevention and intervention, microbiology and other. Please note that the information and views set out in the articles included are those of the author(s) and do not necessarily reflect the official opinion of PHAS. Please send an e-mail to ABR-scan@folkhalsomyndigheten.se if you would like to subscribe, unsubscribe or submit any comments or suggestions.

Surveillance

Global antimicrobial resistance surveillance system (GLASS) report - Early implementation 2017-2018. WHO

Antimicrobial resistance in leprosy: results of the first prospective open survey conducted by a WHO surveillance network for the period 2009-2015' – Author's reply. Clinical Microbiology and Infection

Association between rectal colonization with Highly Resistant Gram-negative Rods (HR-GNRs) and subsequent infection with HR-GNRs in clinical patients: A one year historical cohort study. PLoS One

Emergence of vancomycin-resistant enterococci in Switzerland: a nation-wide survey. <u>Antimicrobial</u> Resistance & Infection Control

Stably high azithromycin resistance and decreasing ceftriaxone susceptibility in *Neisseria* gonorrhoeae in 25 European countries, 2016. BMC Infectious Diseases

Macrolide prescription in Dutch children: compliance with guidelines. <u>European Journal of Clinical</u> Microbiology & Infectious Diseases

Consecutive antibiotic use in the outpatient setting: an extensive, longitudinal descriptive analysis of antibiotic dispensing data in the Netherlands. BMC Infectious Diseases

Antibiotic prescribing upon discharge from the hospital to long-term care facilities: Implications for antimicrobial stewardship requirements in post-acute settings. Infection Control & Hospital Epidemiology

Broad spectrum antibiotics in newborns increase multi-drug resistant infections. <u>Journal of Chemotherapy</u>

Patient-reported complications related to peripherally inserted central catheters: a multicentre prospective cohort study. BMJ Quality and Safety

Global burden of postoperative death. Lancet

Chlorhexidine and octenidine use, carriage of qac genes, and reduced antiseptic susceptibility in methicillin-resistant Staphylococcus aureus isolates from a healthcare network. Clinical Microbiology and Infection

Treatment and diagnosis

Oral versus Intravenous Antibiotics for Bone and Joint Infection. NEJM

Partial Oral versus Intravenous Antibiotic Treatment of Endocarditis. NEJM

Cadazolid for the treatment of Clostridium difficile infection: results of two double-blind, placebo-controlled, non-inferiority, randomised phase 3 trials. <u>Lancet Infectious Diseases</u>

Continuous Versus Intermittent Vancomycin Infusions in Infants: A Randomized Controlled Trial. Pediatrics

Alternatives to Conventional Antibiotics in the Era of Antimicrobial Resistance. <u>Trends in Microbiology</u>

Retrospective evaluation of nitrofurantoin and pivmecillinam for the treatment of lower urinary tract infections in men. PLoS One

Rapid microbial identification and antimicrobial susceptibility testing to drive better patient care: an evolving scenario. Journal of Antimicrobial Chemotherapy

Antimicrobial susceptibility testing of pathogens isolated from blood culture: a performance comparison of Accelerate Pheno™ and VITEK® 2 systems with the broth microdilution method. Journal of Antimicrobial Chemotherapy

Serum albumin is a strong predictor of sepsis outcome in elderly patients. <u>European Journal of Clinical Microbiology & Infectious Diseases</u>

Short- versus long-course therapy in gram-negative bacilli bloodstream infections. <u>European Journal of Clinical Microbiology & Infectious Diseases</u>

A five-day course of oral antibiotics followed by faecal transplantation to eradicate carriage of multidrug-resistant Enterobacteriaceae: A Randomized Clinical Trial. Clinical Microbiology and Infection

Antimicrobial prescribing in older adults. <u>Nurse Practitioner</u>

New Advice on Antibiotics for Hospitalized Children. American Journal of Nursing

Management of Patients with Candida auris Fungemia at Community Hospital, Brooklyn, New York, USA, 2016–2018. Emerging Infectious Diseases

Fecal microbiota transplantation for treatment of recurrent C. difficile infection: An updated randomized controlled trial meta-analysis. PLoS One

Prevention and intervention

Clinical outcome of pharmacist-led prospective audit with intervention and feedback after expansion from patients using specific antibiotics to those using whole injectable antibiotics. European Journal of Clinical Microbiology & Infectious Diseases

Can surgical site infections be controlled through microbiological surveillance? A three-year laboratory-based surveillance at an orthopaedic unit, retrospective observatory study. International Orthopaedics

Effects of an antimicrobial stewardship intervention on perioperative antibiotic prophylaxis in pediatrics. <u>Antimicrobial Resistance & Infection Control</u>

Investigating the cultural and contextual determinants of antimicrobial stewardship programmes across low-, middle- and high-income countries—A qualitative study. <u>PLoS One</u>

Prioritizing research areas for antibiotic stewardship programmes in hospitals: a behavioural perspective consensus paper. Clinical Microbiology and Infection

A recipe for antimicrobial stewardship success: Using intervention mapping to develop a program to reduce antibiotic overuse in long-term care. <u>Infection Control & Hospital Epidemiology</u>

Effectiveness of interventions involving pharmacists on antibiotic prescribing by general practitioners: a systematic review and meta-analysis. <u>Journal of Antimicrobial Chemotherapy</u>

Implementation of a pharmacist-led penicillin allergy de-labelling service in a public hospital. Journal of Antimicrobial Chemotherapy

Antibiotic Stewardship—Twenty Years in the Making. Antibiotics

ESCMID-EUCIC clinical guidelines on decolonisation of multidrug-resistant Gram-negative bacteria carriers. Clinical Microbiology and Infection

Does an antimicrobial stewardship program's interventions reduce the rate of and protect against *Clostridium difficile* infection? <u>Journal of Global Antimicrobial Resistance</u>

Effectiveness of the probiotic Streptococcus salivarius K12 for the treatment and/or prevention of sore throat: a systematic review. <u>Clinical Microbiology and Infection</u>

Impact of single-room contact precautions on hospital-acquisition and transmission of multidrugresistant Escherichia coli: a prospective multicentre cohort study in haematological and oncological wards. <u>Clinical Microbiology and Infection</u>

Infection prevention in the operating room anesthesia work area. <u>Infection Control & Hospital Epidemiology</u>

Effects of control measures on the spread of LA-MRSA among Danish pig herds between 2006 and 2015 – a simulation study. <u>Scientific Reports</u>

Systematic Review of the Effectiveness of the Neonatal Early-Onset Sepsis Calculator. <u>Journal of Perinatal and Neonatal Nursing</u>

Microbiology

Making sense of differences in pneumococcal serotype replacement. <u>Lancet Infectious Diseases</u>

Genomic Analysis of Cardiac Surgery–Associated Mycobacterium chimaera Infections, United States. <u>Emerging Infectious Diseases</u>

Impact of antimicrobial therapy on the gut microbiome. <u>Journal of Antimicrobial Chemotherapy</u>

Other

Why have trials of inhaled antibiotics for ventilator-associated infections failed? <u>Current Opinion in Infectious Diseases</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.