• Standardizing effective surveillance
• Strengthening Infection Control to ensure effective isolation, hand hygiene compliance, environmental disinfection and Antimicrobial stewardship

Antimicrobial resistance is prevalent and has been increasing in Southeast Asia (SEA). The major factor associated with high prevalence of antimicrobial resistance in SEA is inappropriate use of antibiotics including an overuse of antibiotics, and use of low-quality medicines, substandard doses or incomplete course of treatment.

Antimicrobial resistance in SEA is very prevalent in community-acquired infections, healthcare-associated infections and hospital-acquired infections.

For community-acquired infections, the major resistance problems are drug-resistant Streptococcus pneumoniae, drug-resistant enteric pathogens (such as Shigella spp., Campylobacter spp.) and drug-resistant Neisseria gonorrhoeae. Community-acquired mexiticillin-resistant Staphylococcus aureus (CA-MRSA) is prevalent in some countries in SEA. Community-acquired extended-spectrum-beta-lactamase (ESBL)-producing gram-negative bacilli have been increasingly detected.

For healthcare associated infections and hospital-acquired infections, the major resistance problems are MRSA, multidrug-resistant Pseudomonas aeruginosa & Acinetobacter baumannii, and ESBL-producing gram-negative bacilli. Carbapenem-resistant gram-negative bacilli have been increasingly isolated. Colistin-resistant Acinetobacter baumannii and vancomycin-resistant enterococci (VRE) is still uncommon in many countries in SEA. Vancomycin-resistant S.aureus has not been observed.

The current situation and the trend of antimicrobial resistance of common causative bacteria causing infections in each country in SEA will be presented and discussed.

References
1. Raghunath D. Emerging antibiotic resistance in bacteria with special reference to India. J. Biosci (4)593-603.
2. Wattal C, Giel N, Oberoi GK et al. Surveillance of Multidrug Resistant Organisms in a Tertiary Care Hospital in Delhi, India. J. Assoc Physicians India 2010; 58;Supp.3-6
6. Tiwari HK, Sen MR. Emergence of Vancomycin Resistant Staphylococcus Aureus (VRSA) from a tertiary care hospital from northern part of India. BMC Infect Dis 2006;6:156