

2) Antimicrobial Drug Resistance in Asia

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Antimicrobial resistance has become a major health problem worldwide, but marked variations in resistance profiles of bacterial pathogens are found among countries and in different patient settings, especially in Asian countries. The emerging problem of methicillin-resistant *Staphylococcus aureus* (MRSA), extended-spectrum beta-lactamase (ESBL)-producing, quinolone-resistant, and New Delhi Metallo- β -lactamase-1 (NDM-1)-producing *Enterobacteriaceae* is substantial. Extensively drug-resistant (XDR, resistant to all antibiotics available but one or two) Gram-negative bacilli of clinical importance include *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, *Acinetobacter baumannii*, and *Stenotrophomonas maltophilia*. Currently, NDM-1-producing *A. baumannii* also emerged in China. Current data from the Study for Monitoring Antimicrobial Resistance Trends (SMART) demonstrated the high resistance burden of isolates associated with intra-abdominal infections (IAIs) and urinary tract infections (UTIs) in Asia-Pacific region. For IAI isolates, rates of extended-spectrum β -lactamase (ESBL)-producing *E. coli* of >20% was found in South Korea (25.9%), Vietnam (41.1%), and Thailand (47.9%). The rates of susceptibility to levofloxacin of <50% was found in South Korea (48.2%) and Thailand (45.2%). As for UTI *E. coli* isolates, high rates (>20%) of ESBL phenotype was found in India (60.4%), Vietnam (60.2%), Thailand (36.8%), China (34.8%), South Korea (25.9%), and the AP region (23.9%). Rate of ESBL-producing UTI *K. pneumoniae* isolates was 50% in India and Vietnam, 46.7% in Thailand, 20% in South Korea, and 29.5% in AP region. These up-to-date epidemiology and antimicrobial resistance surveillance data are crucial to select appropriate treatment of IAIs and UTIs. Appropriate use of currently available antibiotics and strict adherence of adequate infection control policy are crucial.