Update on the management of difficult to treat Gram-Negative bacterial infection

The Human and Economic cost of Antimicrobial Resistance (AMR) is expected to cause 10 million deaths attributed to AMR in 2050. There could be a reduction of 2% to 3.5% in Gross Domestic Product (GDP) costing the world up to 100 trillion USD to manage this silent pandemic soon.

WHO publishes its first ever list of antibiotic-resistant "priority pathogens" – a catalogue of 12 families of bacteria that pose the greatest threat to human health. Priority 1 which is CRITICAL are carbapenem-resistant Acinetobacter baumannii (CRAB), carbapenem-resistant Pseudomonas aeruginosa, carbapenem-resistant Enterobacteriaceae (CRE).

We will look at the common multi drug resistant organisms around this region and see how the new drugs cater to our own country needs. Some of the drugs that are already available in our shores are Zerbaxa (Ceftolozane/Tazobactam) and Zavicefta (ceftazidime and avibactam) . We will see how best we can use them. However there still seems to be a big hole left in terms of treatment which is the treatment of metallo beta lactamase (MBL) CRE and CRAB in our country. For this, we will explore some potential new antibiotics like cefiderocol and ervacycline in terms of treatment of this difficult organism.