* Pharmacological Management of Respiratory tract infections
* Objectives
* List major respiratory disorders
* Describe strategies for management of infection
* List the major classes of drug used
* Explain the effects, side effects and toxicities of these drugs
* Describe pharmacology of anti-tubercular drugs
* Major respiratory disorders
* Strategies for management of infection
* Gram positive infections: penicillins
* Gram negative infections: aminoglycosides, third generation cephalosporins
* Anaerobic infections: metronidazole
* Viral infections: anti-virals
* Major classes of drugs used
* Inhibitors of cell wall synthesis
* Beta Lactum antibiotics
* Penicillins:
* Amoxycillin, piperacillin etc.
* Cephalosporins
* Cefixime, Ceftriaxone etc.
* Beta lactamase inhibitors
* Clavulinic acid, sulbactam, tazobactum
* Protein synthesis inhibitors
* Inhibit 30 S ribosome
* Aminoglycosides: Amikacin, gentamycin
* Tetracyclines: doxycycline
* Inhibit 50 S Ribosome
* Macrolides: Azithromycin , erythromycin
* Chloramphenicol
* Inhibitors of folic acid metabolism
* Cotrimoxazole:
* Combination of sulfamethoxazole and trimethoprim
* Common side effects and toxicities
* Penicillins and cephalosporins: Hypersensitivity
* Tetracyclines: Teratogenecity, nephrotoxicity
* Cotrimoxazole
* Hypersensitivity, crystalluria
* Quinolones :Tendinitis, tendon rupture
* Aminoglycosides: ototoxicity, nephrotoxicity
* Inhibitors of nucleic acid function
* Quinolones
* Ciprofloxacin , ofloxacin
* Mechanism of action
* Inhibit DNA gyrase in bacteria
* Antitubercular drugs
* **First line drugs**(standard drugs/primary drugs)
* **Second line drugs**(reserve/secondary drugs)
* **Other drugs**
* DOTS
Directly Observed Treatment Short course
* Intensive phase
* Continuation phase