Tuberculosis

uring the last decade of the 20th century e number of new cases of TB increase world w Currently, 95% of TB cases occur in developing countries where resources are often unavailable for proper identification and treatment

- WHO estimates that 30% of the worlds population (about 2 billion) is infected with TB
- more than 80% of TB occur and that approximately 2 million people die of TB world wide each year.

 almost 1.3 million cases and 450,000 deaths occur in children The global burden of TB continuous to grow owing to several factors including:

- 1. The impact of HIV epidemics
- 2. Population migration patterns
- 3. Increasing poverty
- 4. Crowded living condition
- Inadequate health coverage and poor access to health services
 Inefficient TB control programs

Classification of TB cases

New cases
Relapsing cases
Chronic cases
Failure cases

New cases

 Those patient who are newly diagnosed and *never* takes anti-TB drugs or use it for less than one month.

Relapsing cases

 Those patient who successfully treated by anti-TB drugs and then develop symptoms of TB, with positive sputum by stain or culture.

Chronic cases

 Patient who have positive test after full course of treatment

Categories of treatment					
Treatmen	t regimen	tuberculosi	category		
2 nd state	1 st state	S			
4 RH	2 RHZE	All new cases for adults	Category I		
4 RH	2 RHZ	All new cases for children			
5 RHE	2 RHZES / 1 RHZE	Relapse or failure cases of pulmonary TB	category II		
6 EH	3 EHS	Extra-	Category III		

Selected regimens for treatment of TB meningitis in children

Reference	Continuatio n phase	Intensive phase
WHO guidelines	4 HR	2 HRZS
American Academy	7 – 10 HR	2 HRZ(S or E)

Multi-drug resistance TB (category IV)

- At least 3-5 previously not resistant drugs
- Levofloxacin, best suited long term and should be included in the regimen.

• Continue treatment for 18-24 months after sputum culture conversion.



- The dose is calculated according to body weight.
- Single dose before breakfast.

 The treatment should be taken under direct observation(DOTS)

Pregnancy and breast feeding

 The only contraindication is streptomycin

Anti-TB medication in liver disease

- Isoniazid is contraindicated in acute liver injury.
- Pyrazinamide is contraindicated in severe liver damage.

Anti-TB medication in renal impairment

RHZ is safe for patient for renal impairment.

Ethambutol & Streptomycin are nephrotoxic.

