

Advantages of FDCs when they are rational	Disadvantages of FDCs when they are irrational
<ol style="list-style-type: none"> 1. Potentiate therapeutic efficacy 2. Reduce adverse effects of drugs 3. Pharmacokinetic advantage 4. Better compliance with lower pill burden 5. Reduced dose of individual drugs 6. Decreased development of resistance 7. Lower cost <p>Examples: Sulphamethoxazole-Trimethoprim, Combinations of anti-TB, antiretroviral drugs, selected combinations for hypertension, diabetes, inhaled medications for asthma.</p>	<ol style="list-style-type: none"> 1. Increased development of resistance: irrational FDCs of antibiotics in India. 2. Increased adverse effects: e.g. FDCs of NSAIDs in India. 3. Difficult titration of individual drugs: FDCs for diabetes and hypertension if used for initiation of therapy. 4. Higher cost: e.g. FDCs escape price regulation as only few FDCs in NLEM 5. Shortage of single ingredient formulation in India: e.g. shortage of single ingredient cloxacillin, no long-acting beta₂ agonist like formoterol available without combination with inhaled steroids, shortage of hepatitis B vaccine (single-ingredient) but availability in combination with other vaccines
<p>Notes: <i>FDC: Fixed Dose Combinations; NSAID: Nonsteroidal anti-inflammatory drugs; NLEM: National List of Essential Medicines; TB: Tuberculosis</i></p>	

Supplementary File 1. Advantages of rational/scientific FDCs and disadvantages of unscientific FDCs