HNN215: QUALITY USE OF MEDICINES – DRUG PORTFOLIO

DRUG CLASS	EXAMPLES	INDICATION	MECHANISM OF ACTION	SIDE EFFECTS/ADVERSE REACTIONS	NURSING CONSIDERATIONS
PAIN MEDICATIONS					
Non-Narcotic Analgesics Medications that can have a range of pharmacological actions other than analgesia.	• Paracetamol • Salicylates (e.g. aspirin) • NSAIDs (e.g. ibuprofen)	• Mild-moderate pain • Fever	***Peripherally:*** inhibit synthesis of prostaglandins in inflamed tissue (in the CNS), thereby preventing the sensitisation of pain receptors (nociceptors) to mechanical or chemical stimulation -- stopping the transmission of pain messages along the afferent pain fibre. ***Centrally:*** anti-pyretic effect by affecting the hypothalamus.	• Can cause hepatotoxicity (liver toxicity) with elevated doses	*Monitor liver function + be mindful of different strengths/combinations available
NSAIDS • Analgesic • Anti-pyretic • Anti-inflammatory	• Ibuprofen • Diclofenac • Celecoxib • Indometacin • Ketoprofen • Ketorolac tromethamine • Mefenamic acid • Naproxen • Piroxicam • Sulindac • Tiaprofenic acid	• Pain + inflammation from injury • Fever • Rheumatoid arthritis • Osteoarthritis • Dermatitis • Bursitis • Colitis	Inhibits the synthesis of prostaglandins (produce inflammatory-type symptoms) by inhibiting the cyclooxygenase (COX) enzymes, COX-1 and COX-2 which are involved in the conversion of arachidonic acid to prostaglandins, reducing inflammation, fever and producing analgesia. ***SALICYLATES:*** medications chemically related to salicylic acid (e.g. aspirin - adverse effect = gastric intolerance + gastric bleeding) -- prevented by the administration of buffered or enteric-coated forms (increase the rate that aspirin is dissolved, reducing gastric irritation) ***NON-SALICYLATES:*** used for people allergic to aspirin, COX-2 selective inhibitors, lower incidence of negative GI effects, no effect on platelet aggregation, high risk of cardiovascular events -- e.g. aceptimenophen	• GI bleeding • GI distress • Dizziness • Headache • Drowsiness • NSAID-induced renal impairment • Increased risk of cardiovascular events	*Use lowest effective dose for the shortest period of time *Check renal function *Contraindicated for patients with GI ulcers *Do not crush or take enteric coated products with antacids or alkaline foods (dairy)