PHARMACOLOGY NCLEX RN REVIEW made simple-

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DISCLAIMER: This note is intended for study purpose only. Not responsible for other manner.

1-CARDIAC drugs -remember ABC and the endings.

CLASSIFICATION	USES	DRUG example	NURSING CONSIDERATION -	SIDE EFFECT
1-A- ACE inhibitor (PRIL/april) Angiotensin converting enzymes 2-A-ARBS (SARTAN) Angiotensin receptor II	1-heart failure, DM, CHF,, M.Infarction, hypertension 2-cardiac,also excretes NA+ water and retain k+	1-Captopril (capoten) -Enalapril (vasotec) 2-Losartan (cozaar) -Valsartan (diovan)	1-decreased absorption if taken with food,give 1hr before or 2hr after meals -frequent mouth care -position slowly - daily weight. **CAUTION**:- Both risk in pregnancy & renal failure.	1-↓BP (orthostatic), tachycardia , dry C- cough, ↑potassium, A-Angioedema rash,pruritus. 2-S/E Same as ACE except cough in ARBS
3-B- Beta blocker (LOL)	3-heart failure, ↓heart rate, hypertension, angina, Cardiac dysrhythmias ,	3-Metoprolol (lopressor) -Propranolol (Inderal) -Atenolol (tenormin) -Labetalol	3-monitor HR, cardiac rhythm, BP,SOB, wheezing, -before administer check apical HR for one min. -check to misread the hypoglycemic symptom -Labetalol is a fast acting anti HTN, combined (beta-adrenergic and alpha-adrenergic blocker used in HTN crisis)	3-Orthostatic hypotension bradycardia,AV block, bronchoconstriction, bronchospasm
4-C- CA+ Channel Blocker (DIPINE) / (MIL) / (ZEM)	4-heart arrhythmia, hypertension, cardio and vaso selective, SVT	4-Amlodipine (norvasc) -Verapamil (Veranal) -Diltiazem (cardizem)	4-orthostatic precaution -monitor for apical HR, cardiac rhythm -contraindication for heart block -Avoid grapefruit juice can cause severe hypotension.	4- hypotension, peripheral edema, Headache,acute toxicity,constipation, dizziness,fatigue * Adverse reactions to calcium channel blockers such as Amlodipine include gingival hyperplasia.

CLASSIFICATION	USES	DRUG example	NURSING CONSIDERATION -	SIDE EFFECT
5-D- DIURETICS 1-LOOP (mide)	1-pulmonary edema	1-Lasix (Furosemide)	1-check k+ and ca+ , -risk for ototoxicity. - caution for Sulfa allergic pt	1-↓K+, ↓BP, ↑BS
2-THIAZIDES (zide) (Retain Ca+)	2-CHF, hypertension	2-Hydro-(H2O) chlorothiazide	2-monitor I&O, BUN, Creat, electrolytes	2-↓K+, ↓NA+, ↑BS, ↓BP,
3-K+ SPRING(tone) (Retain K+)	3-edema	3-Aldactone	3-avoid salt substitute, check I&O	3-↑K+, ↓Na+, tinnitus, rash, hepatic & renal failure
4-OSMOTIC (tol)	4-ICP & IOP Renal failure	4-Mannitol	4-monitor I & O, electrolytes -Pulmonary edema	4-dry mouth and thirst , headache

OTHER CARDIAC DRUGS-common S/E is dizziness & headache.

CLASSIFICATION	USES	DRUG example	NURSING CONSIDERATION	SIDE EFFECT
6-ANTIANGINALS	6-Angina pectoris	6-Isosorbide (Isordil) -Nitroglycerin	6- take between meals. -repeat dose every 5 mins for 3 dose.	6-↓BP, GI disturbance, flushing
7-ANTI ARRHYTHMIC	7-Ventricular arrhythmias	7-Amiodarone (Cordarone) -Lidocaine (Xylocaine)	7-monitor cardiac rhythm , QT interval, HR, BP. -instruct to wear sunglass and sunscreen.	7-Malaise, ↓BP, cardiac & respiratory arrest,
8-ANTI HYPERTENSIVE	8-Hypertension	8-Hydrochlorothiazide -Hydralazine -Minoxidil -Clonidine -Methyldopa	8-check pulse & BP before adm -Check mental status ,I/O, weight & edema -watch for HTN crisis -do not give Methyldopa with Iron.	8-edema, Palpitations, Tremor,↓BP, angina pectoris.
9-ANTI LIPIDS (STATIN) *HMG-CoA reductase inhibitor	9-High cholesterols, CAD , atherosclerosis	9-Atorvastatin (lipitor) -Lovastatin (mevacor)	9- take with food and at night -check HDL,LDL -report if experience unexplained muscle pain or fever. - No Grapes	9• Hepatotoxicity, Headache, Myalgia, Myopathy • GI symptoms
10-ANTIPLATELETS	10-myocardial infarction, stroke	10-aspirin,Clopidogrel , Prasugrel,Ticagrelor	10-assessed for bruising, tarry stools, and other signs of bleeding	10-hematuria, bleeding gums, epistaxis
11-DIGOXIN (lanoxin)	11-chronic heart failure, Afib, Aflutter		11-eat high k+ food - learn S/S- Digoxin toxicity level	11-N/V, Diarrhea, Dizziness,headache, tachycardia, dysrhythmias.
12-SILDENAFIL	12- heart, impotence		12-dont take with Nitrate.	12-hypotension, myocardial infarction, arrhythmias,.

2-RESPIRATORY DRUGS

learn BAM & SLM(Mnemonics from Mike-Simple Nsg)

B-B2 Antagonist (albuterol)
A- Anticholinergic(ipratropium)
M-Methylxanthine(theophylline)
S-Salmeterol (serevent)
L- Lukast (singulair)
M-Mcrom inhaler (Cromolyn)

CLASSIFICATION	USES	DRUG example	NURSING CONSIDERATION	SIDE EFFECT
1-BRONCHO DILATORS (terol)	1-Bronchial asthma	1-Salmeterol (serevent) -Albuterol (proventil) -Theophylline (theolair)	1-While taking THEOPHYLLINE Avoid Cimeditine and Ciprofloxacin cause increase drug level	1-Tachycardia , N/V heachache, URI, Hypersensitivity. Dizziness,Insomnia, Palpitation.
2-ANTITUSSIVE	2-Nonproductive Cough	2-Benzonatate (tessalon)	2-if numbness and tingling symptoms happens,stay NPO until it resolves.notify HCP	2- respiratory problem,confusion
3-ANTI CHOLINERGIC PIUM /Can't pee,see,split,shit)	3-Bronchospasm with COPD.	3-Ipratropium (atrovent) -Tiotropium (Spiriva)	3-encourage to drink water -watch for dehydration	3-Blurred vision, dry mouth,, Urinary retention, constipation angioedema,epistaxis,
4-MUCOLYTICS	4-COPD,TB, Pneumonia	4-Acetylcysteine (Mucomyst)	4-precaution with gastric ulcer and hepatic patients	4-dizziness,N/V ,bronchospasm, rhinorrhea.
5-EXPECTORANTS	5-asthma,COPD	5- Guaifenesin (Robitussin)	5-assess lungs and maintain fluid - don't take over the counter cold meds.	5- GI upset, nausea, drowsy.

3-PSYCH DRUGS -remember **Zine,zep,zap,pam,lam,cycline,Xetine**
- Therapeutic effect up to 4 weeks & watch for suicidal thoughts.
-caution before general anesthesia 0r Cardiac meds.

CLASSIFICATION ANTI DEPRESSANT	USES	DRUG example	NURSING CONSIDERATION -	SIDE EFFECT
1-Ist Generation TRICYCLICS (Blocks reuptake of Norepi and Serotonin)	1-depression related to alcohol & Cochin withdrawal , obstructive sleep apnea,	1-Amitriptyline (elavil) -Imipramine (tofranil) -Nortriptyline (Pamelor) -Doxepin (Silenor)	1-monitor for suicide ideation -take in bedtime to promote sleep and avoid other sleep inducing drugs -sugarless lozenges or gum for dry mouth.	1-TCAS S/E. • Thrombocytopenia • Cardiac (arrhythmia, MI, stroke) • Anticholinergic effects (tachycardia, urinary retention, etc) • Seizures
2- IInd Generation SSRI (xetine) selective serotonin reuptake inhibitor =SNRI(Serotonin norepinephrine reuptake inhibitor) *norepinephrine-dopamine reuptake inhibitor (NDRI)	2-Blocks Serotonin , depression , anorexia -depression, OCD, anxiety *major depression, seasonal affective disorder (SAD),(ADHD), and nicotine & smoking addiction.	2-Fluoxetine (prozac) -Sertraline (zoloft). -Escitalopram (Lexapro) =Venlafaxine (Effexor) -Duloxetine (Cymbalta) -Atomoxetine (Strattera) *Bupropion (Zyban)	2-take with or without food at Morning -monitor weight,anemia .LFT, thrombocytopenia -good mouth care - assess if client is taking st. Work as it can cause serotonin syndrome. - keep in room temp away from direct light -do not use if you have seizures, anorexia, bulimia, -Antidepressant medications like SSRIs and tricyclics can lead to hypertensive crisis.	2-BAD SSRI • Body weight increase • Anxiety • Dizziness • Serotonin Syndrome • Stimulated CNS • Reproductive/sexual dysfunction • Insomnia SNRI Side Effects SNRI • Suicidal Thoughts • Nausea/Vomiting • Reproductive/sexual dysfunction • Insomnia
3-MAOI Monoamine oxidase inhibitor -learn (PTI/ NPM-Non Popular Meds).	3-Elevates Norepi, Serotonin And dopamine, depression. 4-depression, but more commonly insomnia substance abuse disorders.	3-Phenelzine (Nardil) -Tranylcypromine (Parnate) -Isocarboxazid (Marplan) 4-Trazodone (Oleptro)	3-not the first choice for depression -watch for hypertensive crisis, Initial treatment includes steadily lowering the client's blood pressure to the target goal with the appropriate IV drug. -CAUTION-do not take with SSRIs and avoid Tricyclics until 3 weeks after stopping MAOIs -Avoid Tyramine diet(wine,pickle, aged cheese) 4-It should be taken at bedtime to avoid daytime drowsiness.	3-HAHA • Hypotension, orthostatic • Anticholinergic side effects • Hypertensive Crisis (avoid certain foods) •Anxiety/Agitation/Anorexia Orthostatic hypotension, dizziness, constipation

CLASSIFICATION	USES	DRUG example	NURSING CONSIDERATION	SIDE EFFECT
ANTI ANXIETY 1-BENZODIAZEPINE (Iam & Pam)	1-Anxiety,Alcohol withdrawal ,Insomnia, Seizures,Acute manic episode. ^ sedation , alcohol withdrawal symptoms and tremors *sedation also use for Epilepsy	1-Diazepam (valium) -Lorazepam (Ativan) -Alprazolam (Xanax) -Oxazepam (Serax). ^Chlordiazepoxide (Librium). *Midazolam	-potential for addiction -avoid alcohol - monitor liver function - do not take with MAO Inhibitor. - avoid activities like driving - avoid taking with CNS depressant - Do not stop abruptly and taper dose as HCP order. -Diazepam is long acting	-Respiratory depression , Blurred vision, Orthostatic hypotension, dizziness, Confusion, sedation
2-ATYPICAL ANXIOLYTIC (NON-BENZODIAZEPINE)	2-Panic attack ,social anxiety	2-Buspirone (buspar) Like a boost bar	2-take with or without food.. -avoid grape juice.. -don't drive far -don't do heavy activity	2-chest pain, sore throat numbness, rash, confusion

CLASSIFICATION	USES	DRUG example	NURSING CONSIDERATION	S/E
ANTIPSYCHOTIC 1-Ist generation	Blocks dopa, Schizophrenia, mania, Bipolar	1-Haloperidol (haldol) -Chlorpromazine (thorazine) -Promethazine (phenergan)	1- EPS include akathisia (motor restlessness), dystonias (protrusion of tongue, abnormal posturing), pseudo parkinsonism s/s, and dyskinesia (stiff neck, difficulty swallowing) -high fever may indicate impending neuroleptic malignant syndrome (NMS).	1-Haloperidol s/e is galactorrhea (excessive or spontaneous flow of milk), gynecomastia (excessive growth of male mammary glands) -Chlorpromazine s/e EPS
2- IInd generation (Atypical)	2-Blocks serotonin	2-Quetiapine (Seroquel) -Risperidone (risperdal) -Olanzapine (Zyprexa) -Ziprasidone (Geodon) -Clozapine	2-watch for anticholinergic side effects. -. One of the side effects is agranulocytosis, which is potentially life threatening. The drug will be discontinued if the white blood cells (WBCs) fall below 2000/mm	2-Dizziness, orthostatic hypotension, constipation, insomnia

CLASSIFICATION	USES	DRUG example	NURSING CONSIDERATION	S/E
ANTIEPILEPTIC/ ANTI-CONVULSANT	Epileptic seizures, Inhibit GABA	1-Carbamazepine (tegretol) 2-Phenytoin (dilantin) 3-Divalproex (depakote) 4-Gabapentin (Neurontin) 5-Clonazepam (Klonopin)	1-monitor I/O, CBC,weight or behaviour change. -vit D or folic acid supplement may need and use of sunscreen -do not take with carbonated beverages. -oral contraceptive effect is decrease, use other method 3-This drug has a US boxed warning for fetal risk, hepatotoxicity, clients with mitochondrial disease, and pancreatitis. Valproic acid should be avoided in women of childbearing potential, unless alternate therapies are not appropriate. If prescribed, risks must be discussed and carefully considered and contraception should be used.	1-ataxia, dizziness, drowsiness, nausea, vomiting,pruritus, speech disturbance, amblyopia,xerostomia. hepatotoxicity, renal toxicity,hyponatremia. 2-PHENYTOIN • P-450 interactions • Hirsutism • Enlarged gums/gingival hyperplasia • Nystagmus • Yellow-brown skin • Teratogenicity • Osteomalacia • Interference with B12 metabolism (leading to anemia) 3-nausea/vomiting, alopecia, tremors, vertigo, somnolence, thrombocytopenia, edema, acne, hyperammonemia, hallucinations, encephalopathy.
ANTI PARKINSON	PARKINSON, drug induced Extra pyramidal reactions	-1-Levodopa/carbidopa (sinemet) 2-*Benztropine (Cogentin) *Anti tremor	2-monitor the patient's intake and output to assess for urinary retention. -benztropine (Cogentin), is the first-line treatment for antipsychotic-induced parkinsonism	1 -Twitching,confusion, headache,dizziness, psychosis 2- urinary retention, tachycardia, dry mouth, dry eyes, constipation, and blurred vision.
BIPOLAR AGENT	Manic,mood stabilizer, bipolar	1-Lithium (lithobid)	1-instructed to consume adequate dietary salt, especially after perspiring due to heat or activity. Lithium levels are affected by dietary intake of sodium chloride	1-check Lithium toxicity (early signs-serve thirsty,fine motor tremors, nausea/vomiting,diarrhea, ataxia) *late sign-stupor, hypertonic, seizure,coma, Impaired vision,hepatotoxicity)

4-GASTROINTESTINAL MEDICATION- common S/E- constipation,diarrhea,N/V

CLASSIFICATION	USES	DRUG example	SIDE EFFECT
1-ANTIEMETICS	1-Motion sickness, rhinitis,allergy	1--Promethazine(Phenergan) -Meclizine(Antivert)	1-Urinary retain,dry mouth, hyperglycemia
2-PROTON PUMP INHIBITORS(prazole)	2-GI, Duodenal ulcer	2-Omeprazole(Prilosec) -Pantoprazole(Pantosec)	2-Headache, flatulence
3-H2 RECEPTOR BLOCKERS(tidine)	3-gastric ulcers, GERD,Heartburn	3-Cimetidine(tagamet) -Ranitidine(zantac)	3-Confusion (in elder),rash, headache,Abdominal cramps
4-LAXATIVES (lax/lose.	4-Chronic constipation	4-Sucralfate(carafate) -Lactulose (Enulose) -Bisacodyl (Dulcolax)	4-Increase urine pH levels, anorexia,Hypophosphatemia
5-ANTACIDS	5-GERD,Indigestion, GI distress,Tums for ca+ supplement too	5-Magaldrate(Riopan) -Cal.carbonate (Tums)	5-diarrhea, constipation, nausea, vomiting,kidney stones
6-URIC ACIDS REDUCER	6-gout and kidney stones	6-Allopurinol	6-headache,sore throat

OTHER ANTI INFECTIVES -Common S/E is GI discomfort, fatigue

CLASSIFICATION	USES	DRUG example	SIDE EFFECT
1-a-ANTIVIRAL (vir) B-Protease Inhibitor	1-a-Influenza,STD, Avian Bird flu. b-HIV/Hep C	1-Oseltamivir(Tamiflu) -Valacyclovir (Valtrex) b- Ritonavir and Indinavir	1-Dizziness, cough, headache,rash
2-ANTIFUNGAL (azole)	2-Esophageal, STD	2-Fluconazole. -Ketoconazole	2-Taste distortion
3-ANTIMALARIAL (quine)	3-Malaria, Lupus	3-Hydroxychloroquine	3-Eye disturbance, loss of hair
4-ANTITUBERCULAR (INH)	4-Prevention & treatment of TB	4-Isoniazid. -Rifampicin -Prednisone	4-Liver damage, Peripheral neuropathy.
5-ANTI-INFLAMMATORY (sone) -Corticosteroids -Nonsteroidal anti-Inflammatory.	5-Immunosuppressed, neoplasm -Osteoarthritis, -dysmenorrhea	5-Nabumetone -Naproxen	5-Hypertension,Hyperglycemic. -Tinnitus, rash,Blood dyscrasias, hives ,asthma

5-ANTIBIOTICS/ANTI INFECTION
-learn from endings & Prefix

CLASSIFICATION	USES	DRUG example	NURSING CONSIDERATION	SIDE EFFECT
1-AMINOGLYCOSIDE (mycin) Like a Ants n mice	1-Serious Inf, Peritonitis, Meningitis	1-Amikacin, -Neomycin, -Tobramycin -Streptomycin (ANTS)NOT all	1-Amikacin do not give with caffeine and Aspirin. -watch for allergy and ringing in ear.	1-Ototoxicity, Nephrotoxicity (Oliguria), Pruritus
2-CEPHALOSPORINS (cef) Like a Chef spoon	2-Chr Bronchitis, skin infection	2-Cefepime -Ceftriaxone	2-Renal impairment are more risk for neurotoxicity.	2-Rash,Headache Vaginal yeast inf, neurotoxicity
3-FLUOROQUINOLONES (floxacin) Like a flower queen	3-Endocarditis , Respiratory inf	3-Ciprofloxacin -Levofloxacin	3-prolonged QTc and puts the patient at risk for torsade de pointes.	3-Phototoxicity, Achilles Tendon rupture
4-TETRACYCLINE (cyclic) Like a Ted cycling	4-Chlamydia, syphilis, Gonorrhea	4-Doxycycline -Minocycline	4- doxycycline; do not take before bedtime as it may cause esophageal irritation - do not take with milk, iron,Mgso4,antacids within 1-3hrs of taking doxy to avoid absorption interference. -not for kids	4-Photosensitivity, Heartburn,yellow teeth, brittle bones (spe. in kids)
5-MACROLIDES (thromycin) Like a Macro mice	5-Respiratory inf, STD,Tonsillitis	5(ACE) -Azithromycin -Clarithromycin -Erythromycin	5-Erythromycin -do not take grape juice. -eat 30mins before meal.	5-Taste abnormal, Dyspepsia
6-PENICILLINS (cillin) Like a Penguin in sea	6-Meningitis, STD,UTI, Pneumonia, Peritonitis.	6-Penicillin -Ampicillin -Amoxicillin	6. Caution with client with colitis and enteritis -Give on empty stomach.	6- oral/vaginal Canadians, Pain & rash at injection site, Anaphylaxis
7- VANCOMYCIN	7-serious Gram positive infection	7	7-development of red man syndrome (RMS) .-always be given over at least 60 minutes. - If RMS symptoms appear, the infusion should be stopped immediately and the physician should be notified.-send culture before and check peak & trough.	7-ototoxicity, Nephrotoxic, thrombophlebitis

6-DIABETIC MEDICATION

TYPES OF INSULIN	ONSET	PEAK	DURATION
1-Rapid(Humalog)	Less then 15mins	0.5-1hr	3-4hrs
2-Short(Regular)	0.5-1hrs	2-3hrs	6-8hrs
3-Intermittent (NPH)	1-2hrs	4-12hrs	18-24hrs
4-Long(Lantus)	1-2hrs	No peak	10-24hrs

7-ANALGESICS

PAIN SCALE	PAIN MEDS	NURSING CONSIDERATION	S/E
1-3	-NSAID(Naproxen,Aspirin, , Ibuprofen, Indomethacin, Diclofenac,Ketorolac,celecoxib, Sulindac) -Learn First letter	-contraindicated for persons with bleeding disorder. -check Creatinine level -avoid with CKD	-headache,Tinnitus, Dizziness, GI discomfort, pruritus,rash. Nephrotoxic symptoms
4-6	-OPIOIDS /look for CO -(Codeine,Oxycodone) -Acetaminophen(paracetamol/ Tylenol) with Codeine -Meperidine(Demerol). -Hydrocodone (hycodan)	-Oxycodone contains aspirin, contraindicated for persons with bleeding disorders -NALOXONE is the reversal agent -Demerol for pancreatitis, NOT morphine sulfate.	-Confusion, Respiratory depression,Urinary retention, constipation
7-10	-Morphine (Duramorph) Hydromorphone (Dilaudid) -look for OR	-do not use narcotics in head injury pt,chances of increased intracranial pressure (ICP) -Morphine is contraindicated in Pancreatitis. It causes spasm of the Sphincter of Oddi.	-learn from letter MORPHINE Myosis,Drowsiness, Resp depression, Pneumonia, Hypotension, Infrequency of GI & Urine, Nausea, Euphoria

8-EMERGENCY DRUGS -
(LEAN -Lidocaine,Epinephrine,Atropine,Naloxone)
Management—Isoproterenol,Dopamine,Epinephrine,Atropine)
*IDEA- for Bradycardia & hypotension

DRUG	USED	NURSING CONSIDERATION	S/E
1-L-LIDOCAINE	1-Ventricular arrhythmias, tropical or local anesthesia.	1-monitor ECG,BP,RR -assess numbness and confusion -ask for previous allergy -check for toxicity & level.	1-SAMS- Slurred speech, Altered CNS system, Muscle twitching,Seizures,
2-E-EPINEPHRINE (Adrenaline) EPIPEN	2-Anaphylaxis, Bronchial asthma, COPD, hypersensitivity reactions, chronic simple glaucoma	2-effects sympathetic nervous system, Monitor HR, rhythm, BP and hydration - IV can be harmful - Always check strength 1:100 only for inhalation and 1:1000 for IM/sc	2-Angina,restlessness, dizziness, tachycardia, hypertension, Hyperglycemic
3-A-ATROPINE	3-Decrease respiratory secretions,symptomatic bradycardia, neuro shock	3-Assess for confusion and caution for driving and doing extreme physical activity. -monitor for anticholinergic symptoms like can't pee,can't see, can't poop. - report rash or eye pain ,Dry mouth,	3-,blurred vision, lack of sweating, dizziness, nausea, loss of balance
4-N-NALOXONE (Narcan)	4-Opioid induced toxicity, give in mother during labour, opioid induced res depression	4-asses if pain is relief after administration -assess respiration - check if opiate withdrawal or dependent.	4-hypertension, hyperventilation, tremors,confusion
5-N-NOREPINEPHRINE	5-Vasoconstriction , Increase cardiac output,heart failure	5-bradycardia may occur with the rise in BP, -Monitor BP & urine output. - Infuse with dextrose not NA+ -Protect medicine from light.	5-Headache, palpitations,Nervousness, Epigastric distress, Angina,Hypertension tissue necrosis with extravasation
6-DOPAMINE (intropin)	6-Neurotransmitter, cardiogenic shock, septic shock, urine output	6-low dose dilates renal and coronary arteries, - High dose vasoconstrictors - headache is early symptoms if exceeds, - Monitor BP, pulse and urine output - use infusion pump.	6-Chest pain, dysrhythmias, Increase ocular pressure,pounding heartbeats, confusion,edema, shallow breathing.
7-DOBUTAMINE (dobutrex)	7-Heart attack, heart failure	7--incompatible with alkaline sol(NaHCo3) -administer CVC or large IV infusion pump, do not infuse with other meds -monitor EKG,BP,I/O,K+	7-↑HR,↑BP, PVC, ectopic activity, N/V headache,palpitation.

CLASSIFICATION	USES	NURSING CONSIDERATION	SIDE EFFECT
8-ISOPROTERENOL	8-heart blocks , ventricular arrhythmias, bradycardia , bronchodilator and bronchospasm,asthma	8-stimulates beta1 and 2 ad. -monitor Bp and pulse -don't give HS as its interrupts sleep	8-headache, palpitations,tachycardia,change in BP,angina, bronchial asthma , pulmonary edema.
9-PHENYLEPHRINE	9-hypotension, shock , nasal congestion, SVT,hemorrhoids.	9- it's a Alpha adrenergics receptors -its can treat glaucoma and pupil	9-palpitations, tachycardia, hypertension,dysrhythmias , angina,tissue necrosis.
10-MILRINONE (Vasodilators)	10-, treat severe heart failure	10-positive inotropic agent -smooth muscles relaxant	10-Dysrhythmia Thrombocytopenia, jaundice
11-MIDAZOLAM	11-sedation	-don't take grape juice and alcohol -assess vitals and keep on close observation.	11-headache, loss of balance,dizziness,irregular heartbeat
12--NITROPRUSSIDE (vasodilator)	12-Hypertensive Crisis, Cardiogenic shock	12-caution with intracranial hypertension and venous insufficiency.	12-dizziness, nausea, sore throat, constipation
13-ADENOSINE (antiarrhythmic agent)	13-arrhythmia , paroxysmal Supraventricular tachycardia (PSVT)	13-avoid taking caffeine 12 hr before taking Adenosin	13- chest and throat discomfort, dizziness

9-ANTICOAGULANTS

1- HEPARIN 2-WARFARIN (Coumadin) 3-ASPIRIN	1-Remember HEPA (Check P- PTT / A- APTT 2-Remember WIN/PIN (check PT/INR) -in Tabs only, given after tapering/stopping Heparin. 3-Watch for GI bleeding,thrombocytopenia *There is cross-sensitivity between tartrazine (yellow dye) and aspirin.

10-MATERNITY AND NEWBORN MEDS

- do not use drug X categories and drug without prescription

DRUG	USED	S/E
1-Oxytocin(Pitocin)	1-stimulates muscles induce contraction	1-Allergy,dysrhythmias, change in BP, uterine rupture, hemorrhage
2-Terbutaline	2-Adrenergic antagonist	2-trembling or shaking of hands,headache
3-Ergot alkaloids (Ergotrate)	3-manage postpartum hemorrhage,stimulate uterine muscle	3-nausea, uterine cramping,↓HR, dysrhythmias, Hypertension
4-Magnesium	4-stopping preterm labour, preventing or controlling seizures in preeclampsia	4-depressed respiration and deep tendon reflexes,hypotension, pulmonary edema,↓ urine output
5-Ritodrine -B	5-relax muscles, inhibiting uterine activity and causing Bronchodilation	5-SOB,Tachypnea, Tachycardia, coughing, chest pain, ↓BP
6-Nifedipine (Procardia)	6-ca+ channel blocker, relax muscles .	6-Transient tachycardia, ↓BP, Palpitations, Dizziness
7-Indomethacin	7-Prostaglandin inhibitor, relaxes uterine muscles	7-(Maternal)- N/V,dizziness, Dyspepsia and ICP,necrotizing enterocolitis, Hyperbilirubinemia.
8-Betamethasone	8- in preterm labour , corticosteroid	8-may decrease mother's resistant to infection, pulmonary edema, elevate glucose wit DM client.

Other Maternity MEDS

-RhoGAM(D) -to prevent isoimmunization in Rh-negative clients who are exposed or potentially exposed to Rh+positive red blood cells by transfusion, termination of pregnancy, amniocentesis,abdominal trauma, bleeding during birth, chorionic villus sampling(CVS).
-- Administer at 28wks of gestation and after 72 hours of delivery.(ROUTE-IM only)
--S/E- elevate tempt, tenderness at injection side

-HEPATITIS B VACCINE (HBV)

-If infant was born from HBsAg+positive mother,HBIG should be given within 12hrs of birth in addition to the Hep B vaccine then follow regular scheduled HBV vaccine.
-given IM to all newborn before discharge to prevent Hep B.

. **The Joint Commission has published a list of "Do Not Use" abbreviations.**
This includes Q.D., QD, q.d., qd (daily),Q.O.D., QOD, q.o.d, and qod (every other day). Lack of leading zero (.X mg) or the use of a trailing zero (X.0 mg) is also prohibited due to the risk of overdosing a client. Typically, this list is posted in the medication room or in high traffic areas for nurses and providers. The official "Do Not Use" list applies to all orders and all medication-related documentation that is handwritten (including free-text computer entry) or on pre-printed forms.

THERAPEUTIC DRUG LEVELS

- **Carbamazepine (Tegretol)**: 4 – 10 mcg/ml
- **Digoxin (Lanoxin)**: 0.8 – 2.0 ng/ml
- **Gentamycin (Garamycin):** 5 – 10 mcg/ml (peak),
- **Lithium (Eskalith)**: 8 – 1.5 mEq/L
- **Phenobarbital (Solfoton)**: 15 – 40 mcg/mL
- **Phenytoin (Dilantin)**: 10 – 20 mcg/dL
- **Theophylline (Aminophylline)**: 10 – 20 mcg/dL
- **Tobramycin (Tobrex)**: 5 – 10 mcg/mL (peak)
- **Valproic Acid (Depakene)**: 50 – 100 mcg/ml
- **Vancomycin (Vancocin)**: 20 – 40 mcg/ml (peak),
  5 to 15 mcg/ml (trough)

Tips in PHARM
FOR NCLEX STUDY ONLY GENERIC NAME-not Trade name
- Do not take alcohol or street drugs,herbs with meds
-Caution in Pregnancy and child and old age, Immunocompromised client.
-focus on action,S/E and nursing considerations,food interactions.

----------GOOD LUCK for your NCLEX ----------

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The nurse's quick guide to I.V. drug calculations

Basic dosage calculations

$$\frac{\text{D (desired dose)}}{\text{H (amount on hand)}} \times \text{V (volume)} = \text{Dose}$$

I.V. drips in mcg/minute

$$\frac{\text{mg}}{\text{mL}} \times \frac{1{,}000\ \text{meg}}{1\ \text{mL}} \times \frac{\text{mL}}{1\ \text{hour}} \times \frac{1\ \text{hour}}{60\ \text{minute}} = \text{mcg/minute}$$

(÷ by kg to get mcg/kg/minute)

I.V. drips in unit per hour

$$\frac{\text{D (desire)}}{\text{H (on hand)}} \times \text{V (volume)} = \text{units/hour (\# mL x units/mL = dose)}$$

Dosage calculation conversions

1 mg = 1000 mcg	1gm = 1000 mg
1 L = 1000 mL	1 mL = 1 cc
5 mL = 1 Tsp	3 Tsp = 1 Tbsp
15 mL = 1 Tbsp	30 mL = 1 oz
1 oz = 2 Tbsp	8 oz = 1 Cup
1 kg = 1000 gm (g)	1 kg = 2.2 lbs

IV Solution Cheat Sheet

A quick reference guide on the different intravenous solutions.

IVF	Content	Tonicity	Osmolality (mOsm/L)	Uses
D5W	-50 g/L glucose -170 kcals/L -no electrolytes	Isotonic	252	-treat hypernatremia, replace water loss -free water (helps renal excretion of solutes) -used to administer medications
D10W	-100 g/L glucose -340 kcals/L -no electrolytes	hypertonic	505	-free water only
½NS	-0.45% saline -77 mMol/L of Na+ and Cl⊠ -no calories	hypotonic	154	-maintenance solution, but doesn't replace other daily electrolytes -free water and NaCl -replace hypotonic fluid loss -can cause IVF overload if infused too rapidly
NS	-0.9% saline -154 mMol/L of Na+ and Cl⊠ -no calories	Isotonic	308	-used for postoperative fluids -increase IVF and replace ECF fluid losses -NaCl in higher concentration then blood levels -no free water -can cause IVF overload -only solution that can be administered with blood products
3%NS	-3.0% saline -513 mMol/L of Na+ and Cl⊠	hypertonic	1026	- administer cautiously, slowly - treatment for symptomatic hyponatremia -cerebral edema
D5- ¼ NS	-0.225% saline -50 g/L glucose -170 kcals/L -38.5 mMol/L of Na+ and Cl⊠	Isotonic	330	-Provides NaCl and free water -treatment for hypernatremia -replace hypotonic fluid loss
D5-½NS	-0.45% saline -50 g/L glucose -170 kcals/L	Hypertonic	406	-maintenance solution, but doesn't replace other daily electrolytes -free water and NaCl