

MEDICATION ERROR category

| | | |
|---|--------------------------------------|---------------------------|
| A | potential for error | Ala pa naman |
| B | error did not reach patient | Buti di umabot |
| C | error but no harm | Char wala lang pala |
| D | error with monitoring | Dapat i-monitor |
| E | error with Temporary reversible harm | temporarE / Eentervention |
| F | error & hospitalization | hosFital |
| G | error with Permanent injury | Grabe permanent |
| H | error with near death | nagHingalo |
| I | error with death | Iyak |

Clinical Trials

| | | |
|--|--------------------------------------|--|
| Phase I | is it safe? Goal:safety | 25-50 healthy people (non-blinded) |
| Phase II | does it work? Goal: safety, efficacy | 10-200 with disease (single-blinded) |
| Phase III | is it better? Goal: safety, efficacy | 200-1000 with disease (double-blinded) |
| Phase IV Post-marketing surveillance (Pharmacovigilance) | | |

Types of ADR

| | |
|--|--|
| A - augmented | predictable, dose-dependent, extension effect |
| B - bizarre | Unpredictable, dose-independent, hypersensitivity rxns, idiosyncratic rxns |
| C - continuous | long term effect related to drug, chronic use |
| D - delayed | manifested long after the exposure, carcinogenicity, teratogenicity |
| PREGNANCY RATINGS: | |
| A - safe: human & animal | |
| B - safe (human), unsafe (animal) | |
| C - no studies (human), unsafe (animal) | |
| D - unsafe (human): benefits>>>>risk (can use) | |
| E - unsafe (human): risk>>>> benefits (cant use) | |
| E - end of use | From sudden termination, abruptly discontinued |
| F - failure of therapy | resistance, inappropriate use, patient tolerance, AMR |

Waist hip ratio

| MEN | WOMEN | Risk |
|--------------|--------------|------------------------------------|
| MT 40 inches | MT 35 inches | Cardiovascular & Metabolic disease |
| LT 0.85 | LT 0.75 | Excellent, less risk |
| 1 or higher | 1 or higher | increased risk |

Body MASSAGE Index

| | |
|------------------|------------------------|
| Wt(kg)/ht(m) X 2 | wt(lbs)x703 / ht(in)x2 |
| Underweight | <18.5 |



Body MASSAGE Index (cont)

| | |
|------------------|-------------|
| Normal weight | 18.5 - 24.9 |
| Overweight | 25 - 29.9 |
| Class I obesity | 30 - 34.9 |
| Class II obesity | 35 - 39.9 |
| Class III | MT 40 |

Blood Pressure

| | Systolic | diastolic |
|-------------|----------|-----------|
| Normal | <120 | <80 |
| Pre-HTN | 120-139 | 80-89 |
| Stage 1 HTN | 140-159 | 90-99 |
| Stage 2 HTN | MT 160 | MT 100 |

DD book

| | |
|-----|---|
| S1 | retail dealer o exemp dd |
| S2 | prescriber in prescribing dd |
| S3 | retail dealer of da & exempt da preparations |
| S4 | wholesaler dealer of dd |
| S5I | Importer of da & exempt da preparations |
| S5C | compounder, producer, & manufacturer of da & exempt da preparations |
| S5E | Exporter of da & exempt da preparations |

Terminal Sterilization

| | | |
|---------------------|---------------------|---|
| Moist heat | Protein coagulation | autoclave (121 C, 15 psi, 15-30mins) |
| Dry heat | Oxidation | Oven (160 C, 2-4hrs) |
| Membrane Filtration | physical separation | 0.2 micron filter (for heat sensitive) |
| Gas | alkylation | ethylene Oxide (Carboxide, 10% EtO + 90% CO2) |
| Ionizing Radiation | DNA mutation | Gamma rays |

LAWS

Essential Drugs List of National Drug Formulary

list of alternative drugs prepared & periodically updated by the DOH on the basis of health conditions obtaining in the Philippines, as well as on the internationally accepted criteria

Core List list of drug that meets the needs of majority of population

Complementary List list of alternative drugs used when no response to the core list

Hospital

Dispensing (cont)

| | |
|---------------|---------------------------------|
| Subscription | direction to the RPh |
| Transcription | signa, direction to the patient |

ADVERSE drug effect

| | |
|---|--|
| RA 5921 / 10918 Pharmacy Law | RA 6675 Generics Act of 1988 |
| RA 3720 Food, Drugs & Cosmetics Act | RA 8203 Special Law on Counterfeit Drugs |
| RA 6425 Dangerous Drugs Act of 1972 | RA 4226 Hospital Licensure Act |
| RA 9165 Comprehensive Dangerous Drugs Act of 2002 | RA 9275 Expanded Senior Citizens Act of 2003 |

AO 90 s. 1990 allowed more than 1 medication written in given prescription except Dangerous Drug prescription

AO 62 s. 1989 rules and regulations to implement PRESCRIBED requirements under RA 6675

AO 2012 - 0012 classifications/types of hospitals

| | |
|---------|------------------------------------|
| RA 4226 | PHILIPPINES Hospital Licensure Act |
|---------|------------------------------------|

EO 49 s. 1993 Govt Hospital Procurement must follow only vol 1 of PNDF

AO 63 s. 1989 dispensing requirements under RA 6675

AO 55 labeling requirements under RA 6675

Record & Filing

| | |
|-----------------------------|---|
| Prescription record Book | keep for 2 years |
| Dangerous drugs record Book | keep for 1 yr |
| Poison Book | keep for 5 years |
| Normal Prescription | valid for 1 month |
| | keep in file for 1 yr |
| DD Prescription | limit for 1 month |
| | antiCA limit for 3 months (ex: Morphine supply) |
| | Yellow - kept by RPh |
| | White - kept by physician |
| | Green - kept by patient |

organized structure pools together all healthcare professionals, the diagnostic & therapeutic facilities, equipment & supplies & the physical facilities into a coordinated system for delivering healthcare to the public

Public Health prevention, mitigation of disease in the community

primordial - goes before the patient, changes society

Primary - prevent disease, no disease yet

secondary - early detection, treatment

tertiary - limit disability, rehab

Hospital Pharmacy practice of pharmacy in hospital setting

Dispensing

Preparation & Delivery of a drug or device

PRESCRIPTION: written order & instruction from licensed prescriber to the pharmacist for specific patient

Valid for 1 month (28 days); keep in file for 1 yr

Superscription Rx, recipe

Inscription Drug and dosage

Any untoward occurrence during use of a drug, without without correlation

ADR noxious and unintended, doses normally used

S/Es Unintended effect at normal doses, related to pcol properties

Toxicity noxious and unintended or intended, dose is higher than normal

ME preventable but lead to cause harm while in control of a professional, patient

Study Designs

Case - control retrospective study, info collected from the past

inexpensive, recall bias

Cohort prospective/longitudinal study, no intervention

time consuming, expensive, less recall bias

Cross - sectional survey at a single point in time

new + on-going cases

Randomized controlled clinical trials, GOLD standard, experimental study, 2 or more treatments and placebo

costly,, time consuming, ethical considerations

Evidence Based Medicine

conscientious, explicit & judicious use of concurrent best evidence in making decisions about the care of individuals



Drug Management Cycle

Essential Drugs satisfies healthcare needs of majority

Prescription vs. OTC drugs

Prescription / Ethical Drugs dispense ONLY upon writtn order

For management or treatment of a condition or disease

Non-prescription / OTC Drugs dispensed without written order

only for symptomatic relief at minor self-limiting ailments

Incorrect Prescription

| Erroneous | Violative | Impossible |
|----------------------------------|---|--|
| brand name precedes generic name | generic name is not indicated | generic name is written but NOT legible |
| X - (generic name) | generic name is NOT legible but brand name is legible | generic name does not correspond to brand name |
| brand name not in () | Brand name is only indicated "NO SUBSTITUTION" | both generic and brand name are NOT legible |
| "Shall be filled" | "Shall not be filled" | product is not registered to FDA |
| dispense, report | don't dipense, report | "Shall not be filled" |
| | | don't dispense, report |

Physical Assessment

Respiratory rate 12-20 breathe/min

Number of breaths in 15 secs x 4

Heart Rate 60-100 BPM

number of pulse in 15 secs x 4

Temperature 37 C / 98.6 F

$F = C (9/5) + 32$

$C = F - 32 (5/9)$

Dangerous Drugs

PROHIBITED drugs

opium & its derivatives Heroin & Morphine

coca leaf & its derivatives Cocaine

a & b Eucaine

Hallucinogenic drugs (Mescaline, Lysergic acid diethylamide)

Indian Hemp & its derivatives

other drugs (natural or synthetic) with physiological effects of narcotic drug

REGULATED drugs

Sleep-inducing sedatives barbitals

any salt, isomer, or salt of isomer of Amphetamine Benzedrine or Dexedrine

Hypnotic drugs Methqualone

