

### 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
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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