

LESSON PLAN: 11

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

SCOPE OF UNIT:

Guidelines and procedures for preparation, administration, reporting, and recording of oral, ophthalmic, otic, topical, transdermal, oral metered dose inhaler, nasal, rectal, vaginal, as well as administration of oxygen by nasal cannula.

INFORMATION TOPIC: IV-11 OR DEMONSTRATION:

BASIC GUIDELINES
(Lesson Title)

OBJECTIVES – THE STUDENT WILL BE ABLE TO:

1. Identify general principles in medication administration.
2. Identify responsibilities in preparing medications.
3. Identify responsibilities in administering medications.
4. Identify what should be reported to the charge nurse.
5. Identify information to be recorded on medication chart.
6. List the five “Rights” of medication administration.
7. Identify different medication errors.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. Video Presentation “General Principles of Drug Administration in the Long-Term Care Facility.”
2. HO 29: Do Not Crush List.
3. HO 30: Incident Report Form.
4. HO 31: Guidelines for “Leave of Absence” (LOA) Medications for Long-Term Care Facilities.

INFORMATIONAL ASSIGNMENT

Read Lesson Plan 11 prior to class and be prepared to discuss the information presented.

INTRODUCTION:

Medications are an important part of the care plan for residents in long term care facilities. Medication errors cause 7,000 deaths annually and account for 20% of all medical errors. In Missouri, the most frequent deficiencies in LTC facilities are related to medications. By following the general principles for medication administration, the risk of errors and resident injuries can be dramatically reduced.

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COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

OUTLINE:

- I. General Principles of Medication Administration
 - A. Concentrate on safe preparation and administration of medications. Avoid distractions and interruptions.
 - B. Wash hands or cleanse hands with antibacterial gel before preparing medication and before and after resident contact. Use gloves when necessary.
 - C. Note the diagnosis and reason for each medication.
 - D. Note resident allergies.
 - E. Know the medications – if in doubt consult the supervising nurse, reference book, pharmacist, or physician. Do not give a medication until you know
 1. Normal dosages.
 2. Expected results.
 3. Common side effects.
 4. Contraindications for use.
 5. Specific guidelines for administration (e.g., give with food; give ½ hour before meals, etc.).
 - F. Administer only medications that you have prepared.
 - G. Prepare, administer, and record medications within one hour before or after the scheduled time. If unable to complete the medication pass in the time permitted, notify the charge nurse immediately.
 - H. Review new medication orders with a licensed nurse or pharmacist before giving initial dose for verbal or telephone orders.
 - I. Know how to check the physician's order with the MAR. The order should include:
 1. Name of the drug.
 2. Dosage and form to be administered.
 3. Route of administration (if other than oral).

4. Frequency of administration.
 5. PRN orders must also include the reason to give the medication and time parameters such as “every 4 hours prn pain.” Always check with the licensed nurse before giving prn medications.
- J. Clean up after medication administration.
1. Clean medication trays, the top of the cart, inside of drawers and cabinets.
 2. Wipe up spills or drips from liquid containers paying special attention to labels.
 3. Make sure all medications are stored properly.
 4. Verify all medications are appropriately secured in a locked cart, medicine room, or cabinet.
 5. Empty the trash container on the medication cart.
 6. Restock supplies such as medicine cups or spoons as needed.

II. Five Rights of Medication Administration

To avoid medication errors, remember the five “Rights” of Medication Administration.

- A. Right resident.
- B. Right drug.
- C. Right dose.
- D. Right route.
- E. Right time.

In recent years "Right Charting" has been considered by some to be a “right” as well, however, documentation errors are viewed differently than actual errors in the administration of the medication.

III. Preparation of Medications

- A. Arrive in your work area on time and ready to begin work.
- B. Obtain report from CMT on the previous shift and the charge nurse.
- C. Complete the controlled substance count per facility policy.

- D. Wash hands or cleanse with antibacterial gel.
- E. Gather all necessary equipment such as stethoscope and BP cuff to avoid interruption.
- F. Check medication cart for supplies such as medicine cups and applesauce; restock as needed.
- G. Clean, organize and set up your work surface.
- H. Follow acceptable Infection Control guidelines.
 - 1. Wash hands or cleanse with antibacterial gel prior to preparing medications and before and after resident contact.
 - 2. Avoid touching tablets or capsules. From a container, pour into the lid then dispense into a medication cup. From a punch card, dispense directly into the medication cup.
- I. Compare label of medications bottle or unit dose package with the medication card or medication administration record (MAR). The information must match exactly.
 - 1. Check the resident's name.
 - 2. Check the name of drug, dosage form, and designated route of administration.
 - 3. Check the expiration date on the medication.
 - 4. Check the MAR for resident allergies.
 - 5. Check the label three times and compare with MAR; they must match exactly.
 - a. Check when taking the medication from storage.
 - b. Check before removing the medication from the package.
 - c. Check when returning the medication to storage.
 - 6. Always store medications in the container in which they were received from pharmacy.
 - 7. Any medication that is expired should be set aside for disposal. Medications must be destroyed in the facility by a pharmacist and a licensed nurse or two licensed nurses. Follow facility policies and regulations regarding medication disposal.

8. Return any container that is damaged, incorrect, or with illegible label to pharmacy for re-labeling.

NOTE: Only the pharmacist can put a new label on the container. The CMT is not permitted to write on the label but may apply a change of direction sticker.

9. Be cautious when reading label of look-alike or sound-alike medications.
- J. Check medication for deterioration – abnormal color, smell, or texture.
- K. Follow manufacturer’s guidelines for administration of medications. (e.g., administer on an empty stomach, resident to remain upright for 30 minutes after administration, etc.).
- L. Preparing tablets.
 1. Crushing.
 - a. A doctor’s order is required to crush medications.
 - b. Any medications appearing on the “DO NOT CRUSH” list should not be crushed (e.g., enteric coated, time released) (HO 29).
 2. Most medications can be mixed in a small amount of food (e.g., applesauce) for easier swallowing. Never place medications on the resident's meal tray.
 3. Follow the facility policy and procedure and manufacturer’s instructions for crushing medications. There are many different types of pill crushers on the market. Make sure to thoroughly clean the pill crusher before and after each use to minimize the chance of medication contamination.

CAUTION: Be certain it is not contraindicated before mixing medications with food.

- M. Preparing liquid medications.
 1. Observe the physical appearance of the product. Check the label for special handling and administration instructions such as “shake well” or “do not shake.”
 2. Remove the cap from the bottle and set it upside down on a clean surface to avoid contaminating the cap.
 3. Hold the bottle with the label next to palm of your hand so you pour out of the bottle on the opposite side of label. This prevents medication from running down the bottle and obscuring the label.

4. Use the proper measuring device: a calibrated medicine cup, dropper, or syringe.
 5. Place the medication cup on a flat surface at eye level. Read the measurement at the bottom of meniscus, the lowest point of the liquid in the cup.
 6. When liquid medications are supplied in a pre-measured cup, remove the lid carefully so as not to spill the contents.
 7. Dilute in proper liquids when required by manufacturer's guidelines (e.g., potassium chloride (KCl) liquid in juice or water).
- N. Prepare and organize tray in order of administration (traditional).
- O. Prepare and administer one resident's medications at a time (unit dose; also called modified unit dose or modified traditional).
- P. Transport medications safely. All medications should be clearly identified.
- Q. Never allow a medicine tray or unlocked medication cart out of your sight. Lock the cart if you cannot see it.
- R. Never leave medications unattended on top of the cart.
- S. Cover or close MAR to maintain privacy of the resident's records.

IV. Administration of Medications

- A. Knock on the door before entering the resident's room and wait for permission to enter.
- B. Identify yourself and explain your purpose.
- C. Identify the resident – compare with the med card or MAR.
 1. ID band.
 2. Current picture identification.
 3. Third party identifies resident.
 4. Have the resident tell you his/her name (may be done in addition to one of the above).
- D. Make necessary resident observations prior to administering medication (e.g., check apical pulse prior to dispensing digoxin or check blood pressure according to doctor's orders prior to dispensing antihypertensive).

- E. Do not dispense medication or punch medication from the bubble card until you see the resident.
 - F. Give the resident adequate water. Encourage the resident to take a drink before taking medication to lubricate throat and assist in swallowing medications.
 - G. Stay with the resident (assist as necessary) until all medications are taken.
 - 1. Verify consumption of the medication; do not delegate responsibility to another.
 - 2. Never leave medications at the resident's bedside to be taken later.
 - 3. Discard the empty medication cup in the resident's room and wash hands or use antibacterial gel before moving on to the next resident.
 - H. Administer in a systematic pattern to avoid omissions.
 - I. Administering tablets or capsules.
 - 1. Sublingual – placed under the tongue to dissolve; NO water is given.
 - 2. Buccal – placed between cheek and gum to dissolve; NO water is given.
 - 3. Lozenges – placed in the mouth to dissolve, NO water is given.
 - J. Administering liquids
 - 1. Measure carefully before giving.
 - 2. Cough medication – unless the resident is on a fluid restriction, encourage increased water intake before giving cough medication. Cough medications should be given after other ordered medications and should NOT be followed by water or other liquids.
 - K. Follow facility's policy for medication administration when resident is away from the premises.
- V. Report to the Licensed Nurse
- A. Unusual symptoms new to the resident – hold medication.
 - B. Abnormal vital signs – hold medication.
 - C. Refusal to take a medication or suspicion that resident is not swallowing medications.
 - D. Administration problems.

- E. Adverse drug reaction.
- F. Medication error.
- G. Any PRN medications given and results.

V. Principles of Medication Documentation

- A. Purposes of documentation.
 - 1. Communication tool with other healthcare team members.
 - 2. Legal document – permanent record of care the resident received.
 - 3. Reimbursement from government agencies or insurance companies.
- B. Medications should be recorded as they are dispensed to each resident by the person who administered the medication.
- C. What to record.
 - 1. Name of drug.
 - 2. Dosage and dosage form.
 - 3. Time medication was given.
 - 4. Route by which the medication was given.
 - 5. Initial and name of person administering the medication.
- D. Refusal/omission of a dose.
 - 1. Circle the time the dose should have been given and place your initials inside of the circle.
 - 2. Document why the medication was omitted on the back of the MAR.
 - 3. Notify the charge nurse of what medications were omitted and why.
- E. PRN medications.
 - 1. On front of MAR initial under the date the medication was given.
 - 2. On the back of the MAR document.
 - a. Date and time medication was given.
 - b. Name, dosage and route of medication.

- c. Why medication was given. If given for pain, include the pain scale or behavior indicators.
 - d. Results of the prn medication.
3. Signature.

VI. Medication Errors

- A. Errors may be charting or documentation errors.
 1. Inaccurate spelling of the resident's or doctor's name.
 2. Failure to record a resident's or doctor's full name on subsequent MAR or physician order sheets.
 3. No date (include month, day and year).
 4. Wrong date.
 5. Failure to record an unusual condition, symptom, reaction, or PRN results.
 6. Failure to chart medications when given.
 7. Failure to get doctor's signature on verbal orders.
 8. Failure to sign a record when required.
 9. Failure to identify initials on medication record.
 10. Failure to chart a change in a medication order.
 11. Failure to chart refusal of a medication.
- B. May be an actual medication error. Types of medication errors:
 1. Wrong resident – medication is given to the wrong person.
 2. Omission – any dose of medication that is not given as ordered by the physician.
 3. Wrong dosage – any dose that is either above or below the correct dosage.
 4. Extra dosage – any dose that is given in excess of the total number of times ordered by the physician.

5. Unordered drug – the administration of any medication not ordered for that resident.
 6. Wrong dosage form – a dosage form which is different from the form ordered by the physician.
 7. Wrong time – any medications given more than 1 hour before or after it was schedule to be given. This does not include PRN orders.
 8. Wrong route of administration – the administration of a drug by a different route than was specified by the physician (e.g., giving by mouth a drug ordered by injection).
- C. All medication errors require the completion of an incident report form (per facility policy) and should be reported to the charge nurse immediately (HO 30).

VIII. Leave of Absence Medication (HO 31)

- A. LOA medications are provided when the resident will be away from the facility at the time he/she is scheduled to receive a medication.
- B. Each facility develops a policy and procedure for providing LOA medication.
- C. Facility staff are not permitted to repackage or dispense medication.

IX. Summary and Conclusion

- A. General principles of medication administration.
- B. Preparation of medications.
- C. Administration of medications.
- D. Report to the licensed nurse.
- E. Record on medication chart.
- F. Five rights of medication administration.
- G. Medication error.

In this lesson, we've covered key points in the administration of medications that can virtually eliminate medication errors. Remember the five "RIGHTS" to medication administration, concentrate and avoid interruptions, and know about your resident and his/her drug regimen.

DO NOT CRUSH LIST

Abbreviations	TYPE	REASONS FOR THE FORMULATION
CD controlled dose		Designed to pass through the stomach intact with drug being released in the intestines to:
CR controlled release		(1) prevent destruction of drug by stomach acids
CRT controlled release tablet		(2) prevent stomach irritation
LA long acting	Enteric-coated	(3) delay onset of action
NG nasogastric		Designed to release drug over an extended period of time.
SA sustained action		Such products include:
SR sustained release		(1) multiple-layer tablets releasing drug as each layer is dissolved
TD time delayed		(2) mixed release pellets that dissolve at different time intervals
TR time release	Extended-release	(3) special matrixes that are themselves inert, but slowly release drug from the matrix
XL extended release	Sublingual	Designed to dissolve quickly in oral fluids for rapid absorption by the abundant blood supply of the mouth
XR extended release		Drugs that
		(1) produce oral mucosa irritation
		(2) are extremely bitter
		(3) contain dyes or inherently could stain teeth and mucosal tissue
	Miscellaneous	(4) drugs that, if handled without adequate protection, are potentially carcinogenic

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Aciphex	Tablet	Show-release
Accutane	Capsule	Mucous membrane irritant
Actiq	Lozenge	Show-release; NOTE: this lollipop delivery system requires the patient to slowly allow dissolution
Actonel	Tablet	Irritant; NOTE: chewed, crushed, or sucked tablets; may cause oropharyngeal irritation
Adalat CC	Tablet	Slow-release
Adderall XR	Capsule	Slow-release (a)
AeroHist Plus	Tablet	Slow-release (h)
Afeditab CR	Tablet	Slow-release
Alavert Allergy Sinus 12 Hour	Tablet	Slow-release
Allegra-D	Tablet	Slow-release
Allfen Jr	Tablet	Slow-release
Allfen Jr	Capsule	Slow-release (a)
Alprazolam ER	Tablet	Slow-release
Altoprev	Tablet	Slow-release
Ambien CR	Tablet	Slow-release
Aptivus	Capsule	NOTE: oil emulsion within spheres; taste
Aquatab C	Tablet	Slow-release (h)
Aquatab D	Tablet	Slow-release (h)
Arthrotec	Tablet	Enteric-coated
Asacol	Tablet	Slow-release
Ascriptin A/D	Tablet	Enteric-coated
Augmentin XR	Tablet	Slow-release (b,h)
Avinza	Capsule	Slow-release (a; not pudding)

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Avodart	Capsule	NOTE: drug may cause fetal abnormalities; women who are, or may become, pregnant should not handle capsules; all women should use caution in handling capsules, especially leaking capsules
Azulfidine EN-tabs	Tablet	Enteric-coated
Bayer Enteric-coated	Caplet	Enteric-coated
Bayer Low Adult	Tablet	Enteric-coated
Bayer Regular Strength	Caplet	Enteric-coated
Bellahist-D LA	Tablet	Slow-release
Biaxin-XL	Tablet	Slow-release
Bidhist	Tablet	Slow-release
Bidhist-D	Tablet	Slow-release
Biltricide	Tablet	Taste (h)
Bisa-Lax	Tablet	Enteric-coated (c)
Biohist LA	Tablet	Slow-release (h)
Bisac-Evac	Tablet	Enteric-coated (c)
Bisacodyl	Tablet	Enteric-coated (c)
Boniva	Tablet	Irritant: do not chew or suck; NOTE: potential for oropharyngeal ulceration
Bromfed PD	Capsule	Slow-release
Budeprion SR	Tablet	Slow-release
Calan SR	Tablet	Slow-release (h)
Carbatrol	Capsule	Slow-release (a)
Cardene SR	Capsule	Slow-release
Cardizem	Tablet	NOTE: although no described as slow release in the package insert, the drug has a coating that is intended to release the drug over a period of approximately 3 hours
Cardizem CD	Capsule	Slow-release
Cardizem LA	Tablet	Slow-release
Cardura XL	Tablet	Slow-release
CartiaXT	Capsule	Slow-release
Cefaclor Extended-Release	Tablet	Slow-release
Ceftin	Tablet	Taste (b); NOTE: use suspension for children
Cefuroxime	Tablet	Taste (b); NOTE: use suspension for children
CellCept	Capsule	Teratogenic potential (i)
CellCept	Tablet	Teratogenic potential (i)
Charcoal Plus	Tablet	Enteric-coated
Chlor-Trimeton 12-Hour	Tablet	Slow-release (b)
Cipro XR	Tablet	Slow-release
Claritin-D 12 Hour	Tablet	Slow-release
Claritin-D 24 Hour	Tablet	Slow-release
Colace	Capsule	Taste (e)
Colestid	Tablet	Slow-release
Concerta	Tablet	Slow-release
Commit	Lozenge	NOTE: integrity compromised by chewing or crushing

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Coreg CR	Capsule	Slow-release
Cotazym-S	Capsule	Enteric-coated (a)
Covera-HS	Tablet	Slow-release
Creon 5, 10, 20	Capsule	Slow-release (a)
Crixivan	Capsule	Taste; NOTE: Capsule may be opened and mixed with fruit puree (eg, banana)
Cymbalta	Capsule	Slow-release
Cytoxan	Tablet	NOTE: drug may be crushed by company recommends using injection
Cytovene	Capsule	Skin irritant
Dallergy	Tablet	Slow-release (b,h)
Dallergy JR	Capsule	Slow-release
Deconamine SR	Capsule	Slow-release (b)
Depakene	Capsule	Slow-release mucous membrane irritant (b)
Depakote	Tablet	Slow-release
Depakote ER	Tablet	Slow-release
Detrol LA	Capsule	Slow-release
Dilacor XR	Capsule	Slow-release
Dilatrate-SR	Capsule	Slow-release
Dilt-CD	Capsule	Slow-release
Dilt-XR	Capsule	Slow-release
Diltia XT	Capsule	Slow-release
Ditropan XL	Tablet	Slow-release
Doxidan	Tablet	Enteric-coated (c)
Drisdol	Capsule	Liquid-filled (d)
DriHist SR	Tablet	Slow-release (h)
Drixoral Cold/Allergy	Tablet	Slow-release
Drixoral Nondrowsy	Tablet	Slow-release
Drixoral Allergy Sinus	Tablet	Slow-release
Droxia	Capsule	NOTE: exposure to the powder may cause serious skin toxicities; health care workers should wear gloves to administer
Drysec	Tablet	Slow-release (h)
Dulcolax	Tablet	Enteric-coated (c)
Dulcolax	Capsule	Liquid-filled
DuraHist	Tablet	Slow-release (h)
DuraHist D	Tablet	Slow-release (h)
Duraphen II	Tablet	Slow-release (h)
Duraphen II DM	Tablet	Slow-release (h)
Duraphen Forte	Tablet	Slow-release (h)
Duratuss	Tablet	Slow-release (h)
Duratuss A	Tablet	Slow-release (h)
Duratuss PE	Tablet	Slow-release (h)
DynaCirc CR	Tablet	Slow-release
Dynex	Tablet	Slow-release (h)

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Easprin	Tablet	Enteric-coated
EC-Naproxyn	Tablet	Enteric-coated
Ecotrin Adult Low Strength	Tablet	Enteric-coated
Ecotrin Maximum Strength	Tablet	Enteric-coated
Ecotrin Regular Strength	Tablet	Enteric-coated
Ed A-Hist	Tablet	Slow-release (b)
E.E.S. 400	Tablet	Enteric-coated (b)
Effer-K	Tablet	Effervescent tablet (f)
Effervescent Potassium	Tablet	Effervescent tablet (f)
Effexor XR	Capsule	Slow-release
Efidac/24 Pseudoephedrine	Tablet	Slow-release
Efidac/24	Tablet	Slow-release
E-Myan	Tablet	Enteric-coated
Enablex	Tablet	Slow-release
Entex LA	Capsule	Slow-release (b)
Entex PSE	Capsule	Slow-release
Entocort EC	Capsule	Enteric-coated (a)
Equetro	Capsule	Slow-release (a)
Ergomar	Tablet	Sublingual form (g)
Eryc	Capsule	Enteric-coated (a)
Ery-Tab	Tablet	Enteric-coated
Erythrocin Stearate	Tablet	Enteric-coated
Erythronycin Base	Tablet	Enteric-coated
Evista	Tablet	Taste; teratogenic potential (i)
ExeFen PD	Tablet	Slow-release (h)
Extendryl JR	Capsule	Slow-release
Extendryl SR	Capsule	Slow-release (b)
Faldene	Capsule	Mucous membrane irritant
Feen-a-mint	Tablet	Enteric-coated (c)
Fentora	Tablet	NOTE: buccal tablet; swallow whole
Feosol	Tablet	Enteric-coated (b)
Feratab	Tablet	Enteric-coated (b)
Fergon	Tablet	Enteric-coated
Fero-Grad 500 mg	Tablet	Slow-release
Ferro-Sequels	Tablet	Slow-release
Flagyl ER	Tablet	Slow-release
Fleet Laxative	Tablet	Enteric-coated (c)
Flomax	Capsule	Slow-release
Focalin XR	Capsule	Slow-release (a)
Fosamax	Tablet	Mucous membrane irritant
Geocillin	Tablet	Taste
Gleevec	Tablet	Taste (h); NOTE: may be dissolved in water or apple juice
Glipizide	Tablet	Slow-release
Glucophage XR	Tablet	Slow-release

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Glucotrol XL	Tablet	Slow-release
Glumetza	Tablet	Slow-release
Guaifed	Capsule	Slow-release
Guaifed-PD	Capsule	Slow-release
Guaifenesin/Pseudoephedrine	Tablet	Slow-release
Guaifenex DM	Tablet	Slow-release (h)
Guaifenex GP	Tablet	Slow-release
Guaifenex PSE	Tablet	Slow-release (h)
Guaimax-D	Tablet	Slow-release
H9600 SR	Tablet	Slow-release
Halfprin 81	Tablet	Enteric-coated
Heartline	Tablet	Enteric-coated
Hista-Vent DA	Tablet	Slow-release (h)
Hydrea	Capsule	NOTE: exposure to the powder may cause serious skin toxicities; health care workers should wear gloves to administer
Imdur	Tablet	Slow-release (h)
Inderal LA	Capsule	Slow-release
Indocin SR	Capsule	Slow-release (a,b)
Innopran XL	Capsule	Slow-release
Invega	Tablet	Slow-release
Ionamin	Capsule	Slow-release
Isochron	Tablet	Slow-release
Isoptin SR	Tablet	Slow-release (h)
Isordil Sublingual	Tablet	Sublingual form (g)
Isosorbide Dinitrate Sublingual	Tablet	Sublingual form (g)
Isosorbide SR	Tablet	Slow-release
K+8	Tablet	Slow-release (b)
K+10	Tablet	Slow-release (b)
Kadian	Capsule	Slow-release (a); NOTE: give via NG tubes
Kaletra	Tablet	Film-coated
Kaon CL-10	Tablet	Slow-release (b)
Keppra	Tablet	Slow-release (b)
Ketek	Tablet	Slow-release (b)
Klor-Con	Tablet	Slow-release (b)
Klor-Con M	Tablet	Slow-release (b,h)
Klotrix	Tablet	Slow-release
K-Lyte	Tablet	Effervescent tablet (f)
K-Lyte CL	Tablet	Effervescent tablet (f)
K-Lyte DS	Tablet	Effervescent tablet (f)
K-Tab	Tablet	Slow-release (b)
Lescol XL	Tablet	Slow-release

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Levbid	Tablet	Slow-release (h)
Levsinex Timecaps	Capsule	Slow-release
Lexxel	Tablet	Slow-release
Lialda	Tablet	Slow-release
Lipram 4500	Capsule	Enteric-coated (a)
Lipram PN 10, 16, 20	Capsule	Enteric-coated, slow-release 9a)
Lipram UL 12, 18, 20	Capsule	Enteric-coated, slow-release (a)
Liquibid-D 1200	Tablet	Slow-release (h)
Liquibid-PD	Tablet	Slow-release (h)
Lithobid	Tablet	Slow-release
Lodrane 24	Capsule	Slow-release
LoHist 12 Hour	Tablet	Slow-release
Maxifed DM	Tablet	Slow-release (h)
Maxifed DMX	Tablet	Slow-release (h)
MAXIPHEN DM	Tablet	Slow-release (h)
Medent-DM	Tablet	Slow-release
Mestinon Timespan	Tablet	Slow-release (b)
Metadate ER	Tablet	Slow-release
Metadate CD	Capsule	Slow-release (a)
Methylin ER	Tablet	Slow-release
Micro K Extendcaps	Capsule	Slow-release (a,b)
Miraphen PSE	Tablet	Slow-release
Modane	Tablet	Enteric-coated (c)
Morphine sulfate extended-release	Tablet	Slow-release
Motrin	Tablet	Taste (e)
MS Contin	Tablet	Slow-release (b)
Mucinex	Tablet	Slow-release
Mucinex DM	Tablet	Slow-release
Muco-Fen-DM	Tablet	Slow-release (h)
Myfortic	Tablet	Slow-release
Naprelan	Tablet	Slow-release
Nasatab LA	Tablet	Slow-release (h)
Nexium	Capsule	Slow-release (a)
Niaspan	Tablet	Slow-release
Nicotinic Acid	Capsule	Slow-release (h)
Nicotinic Acid	Tablet	Slow-release (h)
Nifediac CC	Tablet	Slow-release
Nifedical XL	Tablet	Slow-release
NitroQuick	Tablet	Sublingual route (g)
Nitrostat	Tablet	Sublingual route (g)
Norpace CR	Capsule	Slow-release form within a special capsule
Ondrox	Tablet	Slow-release

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Opana ER	Tablet	Slow-release; NOTE: tablet disruption may cause a potentially fatal overdose of oxymorphone
Oracea	Capsule	Slow-release
Oramorph SR	Tablet	Slow-release (b)
Oxycontin	Tablet	Slow-release; NOTE: tablet disruption may cause potentially fatal overdose of oxycodone
Palcaps (all)	Capsule	Enteric-coated (a)
Pancrease MT	Capsule	Enteric-coated (a)
Pancrecarb MS	Capsule	Enteric-coated (a)
Pancrelipase	Capsule	Enteric-coated (a)
Panocaps	Capsule	Enteric-coated (a)
Panocaps MT	Capsule	Enteric-coated (a)
Paxil CR	Tablet	Slow-release
Pentasa	Capsule	Slow-release
PhenaVent D	Tablet	Slow-release (h)
PhenaVent LA	Capsule	Slow-release
Plendil	Tablet	Slow-release
Pre-Hist-D	Tablet	Slow-release (h)
Prevacid	Capsule	Slow-release
Prevacid Solu Tab	Tablet	Orally disintegrating; NOTE: do not swallow; dissolve in water only and dispense via dosing syringe or NT tube
Prevacid Suspension	Suspension	Slow-release; NOTE: contains enteric-coated granules; mix with water only; not for use in NG tubes
Prilosec	Capsule	Slow-release
Philosec OTC	Tablet	Slow-release
Procanbid	Tablet	Slow-release
Procardia XL	Tablet	Slow-release
Profen II	Tablet	Slow-release (h)
Profen II DM	Tablet	Slow-release (h)
Profen Forte	Tablet	Slow-release (h)
Profen Forte DM	Tablet	Slow-release (h)
Propecia	Tablet	NOTE: women who are, or may become, pregnant should not handle crushed or broken
Proquin XR	Tablet	Slow-release
Proscar	Tablet	NOTE: women who are, or may become, pregnant should not handle crushed or broken
Protonix	Tablet	Slow-release
Prozac Weekly	Tablet	Enteric-coated
Pseudo CM TR	Tablet	Slow-release (h)
Pseudovent	Capsule	Slow-release (a)
Pseudovent 400	Capsule	Slow-release (a)
Pseudovent-PED	Capsule	Slow-release 9a)
Pseudovent DM	Tablet	Slow-release (h)
PYtest	Capsule	NOTE: radiopharmaceutical
QDall	Capsule	Slow-release
QDall AR	Capsule	Slow-release

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Ralix	Tablet	Slow-release (h)
Renaex	Tablet	Slow-release
Razadyne ER	Capsule	Slow-release (b)
Renagel	Tablet	NOTE: tablets expand in liquid if broken or crushed
Rescon	Tablet	Slow-release (h)
Rescon JR	Tablet	Slow-release (h)
Rescon MX	Tablet	Slow-release (h)
Respa-1 st	Tablet	Slow-release (h)
Respa-DM	Tablet	Slow-release (h)
Respahist	Capsule	Slow-release (a)
Respaire 120 SR	Capsule	Slow-release
Respaire 60 SR	Capsule	Slow-release
Ritalin LA	Capsule	Slow-release (a)
Ritalin SR	Tablet	Slow-release
R-Tanna	Tablet	Slow-release
Rythmol SR	Capsule	Slow-release
Sinemet CR	Tablet	Slow-release (h)
SINUventPE	Tablet	Slow-release (h0)
Slo-Niacin	Tablet	Slow-release (h)
Solodyn	Tablet	Slow-release
Somnote	Capsule	Liquid-filled
Sprycel	Tablet	Film-coated; NOTE: active ingredients are surrounded by a wax matrix to prevent health care exposure; women who are, or may become, pregnant should not handle crushed or broken tablets
Stahist	Tablet	Slow-release
Strattera	Capsule	NOTE: capsule contents can cause ocular irritation
Sudafed 12 hour	Capsule	Slow-release (b)
Sudafed 24 hour	Capsule	Slow-release (b)
Sular	Tablet	Slow-release
SymaxDuotab	Tablet	Slow-release
Symax SR	Tablet	Slow-release
Taztia XT	Capsule	Slow-release 9a)
Tegretol-XR	Tablet	Slow-release
Temodar	Capsule	NOTE: if capsules are accidentally opened or damaged, rigorous precautions should be taken to avoid inhalation or contact of contents with the skin or mucous membranes (i)
Tessalon Perles	Capsule	NOTE: swallow whole; temporary local anesthesia of the oral mucosa and choking could occur
Theo-24	Capsule	Slow-release; NOTE: contains beads that dissolve throughout the GI tract
Tiazac	Capsule	Slow-release (a)
Topamax	Tablet	Taste
Toprol XL	Tablet	Slow-release (h)
Touro CC-LD	Tablet	Slow-release (h)
Touro LA-LD	Tablet	Slow-release (h)

DRUG PRODUCT	DOSAGE FORM	DOSAGE REASONS/COMMENTS
Tracleer	Tablet	NOTE: women who are, or may become, pregnant should not handle crushed or broken tablets
Trental	Tablet	Slow-release
Tylenol Arthritis	Tablet	Slow-release
Ultram ER	Tablet	Slow-release; NOTE: tablet disruption may cause a potentially fatal overdose of tramadol
Uniphyl	Tablet	Slow-release
Urocit-K	Tablet	Wax-coated
Uroxatral	Tablet	Slow-release
Valcyte	Tablet	Teratogenic and irritant potential (i)
Verapamil SR	Tablet	Slow-release (h)
Verelan	Capsule	Slow-release (a)
Verelan PM	Capsule	Slow-release (a)
VesiCare	Tablet	Enteric-coated
Videx EC	Capsule	Slow-release
Voltaren XR	Tablet	Slow-release
VoSpireER	Tablet	Slow-release
Wellbutrin SR	Tablet	Slow-release
Wellbutrin XL	Tablet	Slow-release
Xanax XR	Tablet	Slow-release
Zolinza	Capsule	NOTE: irritant; avoid contact with skin or mucous membranes; avoid contact with crushed or broken tablets
ZORprin	Tablet	Slow-release
Zyban	Tablet	Slow-release

Key:

- (a) Capsule may be opened and the contents taken without crushing or chewing; soft food such as applesauce or pudding may facilitate administration; contents may generally be administered via NG tube using an appropriate fluid provided entire contents are washed down the tube.
- (b) Liquid dosage forms of the product are available; however, dose, frequency of administration, and manufacturers may differ from that of the solid dosage form.
- (c) Antacids and/or milk may prematurely dissolve the coating of the tablet.
- (d) Capsule may be opened and the liquid contents removed for administration.
- (e) The taste of this product in a liquid form would likely be unacceptable to the patient; administration via NG tube should be acceptable.
- (f) Effervescent tablets must be dissolved in the amount of diluent recommended by the manufacturer.
- (g) Tablets are made to disintegrate under the tongue.

- (h) Tablet is scored and may be broken in half without affecting release characteristics.
- (i) Skin contact may enhance tumor production; avoid direct contact.

Disclaimer: This listing is not meant to represent all products, either by generic or trade name. The author encourages manufacturers, pharmacists, nurses, and other health professionals to notify him of any changes or updates.

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GUIDELINES FOR “LEAVE OF ABSENCE” (LOA) MEDICATIONS FOR LONG-TERM CARE FACILITIES

Medications must be provided for administration when a resident goes on a leave of absence from the facility. The facility should have policies and procedures for providing leave of absence medications that may include the following:

- The facility should inform physicians of the policies and procedures. The facility may have a policy that limits the quantity of medication sent with a resident without approval of the physician. The physician should be consulted when it is necessary to send a larger quantity if there is concern about resident or family ability to properly handle this quantity related to administering, storing, security, intentional overdose, or return of remaining medication to the facility.
- An authorized facility medication staff member should review current medication orders with the resident or responsible person. When necessary, such as when there are complex instructions or changes in dose, the staff member should provide information regarding administration in writing in addition to the medication label.
- A facility nurse should consult with the physician if a resident is a candidate for special options to accommodate routine absences such as sheltered workshops, school, or other limited absences. These options may include changes in administration times or doses, or omission of doses, when clinically appropriate.
- The facility should inform residents and their families of the policies and procedures.
- The facility should keep a record of the medications and quantities sent with the resident and returned, and the resident or responsible person should sign for the medications. This is especially important for controlled substances.
- Medications returned to the facility should be inspected to see if they are suitable for continued use. They should not be combined with medications in other containers. Containers should be identified as having been sent with the resident and should not later be returned to the pharmacy for reuse.

Facility staff are not allowed by law to repackage or dispense medications. The following options are available to provide leave of absence medications:

- An authorized facility medication staff member may send prescription medication cards or other multiple-dose prescription containers with the resident if the containers are labeled by the pharmacy with instructions for use.
- The pharmacy may provide an appropriate quantity of each medication separately packaged and labeled for home use as part of the regular monthly refill.

- The resident's family or the facility may obtain separate prescriptions for home storage, or for individual leave quantities.
- The pharmacy may provide an appropriate quantity of each medication separately packaged and labeled for a resident who attends school or a sheltered workshop. This supply may be sent with the resident and returned daily or maintained at the school or workshop. The facility is responsible to assure that medications are stored and administered properly at the school or workshop.

LESSON PLAN: 11

COURSE TITLE: MEDICATION TECHNICIAN

UNIT: IV PREPARATION AND ADMINISTRATION

EVALUATION ITEMS:

Circle the letter of the best answer.

1. Which statement is NOT a general principle of medication administration?
 - a. Concentrate when passing medications.
 - b. Know how to check physicians order with the MAR.
 - c. Prepare, administer, and record medications within one hour before or after scheduled time.
 - d. Administer medications prepared by the licensed nurse.

2. Which statement is true in regard to preparing medications?
 - a. Never shake liquid medications.
 - b. Check the label three times.
 - c. Every medication can be mixed with food.
 - d. Always crush medications for residents who have trouble swallowing.

3. Which statement is NOT true in regard to administering medications?
 - a. To save money, reuse medication cups.
 - b. Verify consumption of medication.
 - c. Identify resident with current I.D. band and medication card or MAR.
 - d. Observe resident prior to giving medication.

4. Which of the following does NOT need to be reported to licensed nurse?
 - a. Resident voided 200mL of clear amber urine.
 - b. Blood pressure of 200/120.
 - c. Complaints of dizziness.
 - d. Refusal to take a medication.

5. When should you record medications given?
 - a. Before you have prepared the medications.
 - b. Immediately after giving unit dose medications
 - c. At the end of your shift.
 - d. The licensed nurse records which medications are given.

6. The medication technician gave a resident a medication at 8:00 a.m., noon, and 8:00 p.m. The resident was scheduled to receive the medication at 8:00 a.m. and 8:00 p.m. What kind of a medication error is this?
 - a. Omissions.

- b. Wrong dosage.
 - c. Extra dose.
 - d. Wrong dosage form.
7. Failing to get the doctor's signature on verbal orders is what kind of an error?
- a. Charting error.
 - b. Omissions.
 - c. Wrong time.
 - d. Unordered drug.
8. List the 5“rights” of medications administration.