W4444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444

UNIT TERMINAL OBJECTIVE

1-3 At the completion of this unit, the EMT-Intermediate student will be able to understand the basic principles of gemeral pharmacology as outlined in the EMT-Basic curriculum.

COGNITIVE OBJECTIVES

At the completion of this unit, the EMT-Intermediate student will be able to:

1-3.1 Identify which medications will be carried on the unit.(C-1)
1-3.2 State the medications carried on the unit by the generic name. (C-1)
1-3.3 Identify the medications with which the EMT-Basic may assist the patient with administering. (C-1)
1-3.4 State the medications the EMT-Basic can assist the patient with by the generic name.(C-1)
1-3.5 Discuss the forms in which the medications may be found. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the EMT-Intermediate student will be able to:

4-1.6 Explain the rationale for the administration of medications.(A-3)

PSYCHOMOTOR OBJECTIVES

4-1.7 Demonstrate general steps for assisting patient with self-administration of medications.(P-2)
4-1.8 Read the labels and inspect each type of medication.(P-2)

S))))))

Declarative (What)

I. Overview - the importance of medications and the dangers associated with their administration.

II. Medications (which may be carried on the EMS unit)
   A. Activated Charcoal - learned as a part of the poison/overdose module (4-6)
   B. Syrup of Ipecac - learned as a part of the poison/overdose module. (4-6)
   C. Oral Glucose - learned as a part of the diabetes module (4-4).
   D. Oxygen (refer to airway module).
   E. Epinephrine - learned as a part of the allergies module (4-5)
   F. Albuterol - regional option for treatment of asmatics

III. Medications (prescribed by a physician and the patient has them in his possession; they are not carried on the EMS unit. May assist patients in taking, with approval by medical direction).
   A. Inhaler - learned as a part of the respiratory module (4-2).
   B. Nitroglycerin - learned as a part of the cardiac module (4-3).

IV. Medication names
   A. Generic
      1. The name listed in the U.S. Pharmacopedia, a governmental publication listing all drugs in the U.S.
      2. Name assigned to drug before it becomes officially listed. Usually a simple form of the chemical name.
      3. Give examples per local protocol.
   B. Trade
      1. Brand name is the name a manufacturer uses in marketing the drug.
      2. Give examples.

V. Indications - the indication for a drug's use includes the most common uses of the drug in treating a specific illness.

VI. Contraindications - situations in which a drug should not be used because it may cause harm to the patient or offer no effect in improving the patient's condition or illness.

VII. Medication Form
   A. Medications the EMT-Basic carries on the unit or medications that a patient may have a prescription for that the EMT-Basic may assist with administration.
      1. Compressed powders or tablets - nitroglycerin
      2. Liquids for injection - epinephrine
      3. Gels - glucose
      4. Suspensions - activated charcoal
      5. Fine powder for inhalation - prescribed inhaler
      6. Gases - oxygen
      7. Sub-lingual spray - nitroglycerin
      8. Liquid/vaporized fixed dose nebulizers
   B. Each drug is in a specific medication form to allow properly controlled concentrations of the drug to enter into the blood stream where it has an effect on the target body system.
   C. Medications have a specific shelf life and expiration dates.

VIII. Dose - state how much of the drug should be given.

S))))))

IX. Administration - state route by which the medication is administered such as oral, sublingual (under the tongue), injectable, or intramuscular.

X. Actions - state desired effects a drug has on the patient and/or his body systems.

XI. Side Effects - state any actions of a drug other than those desired. Some side effects may be predictable.

XII. Re-assessment strategies
- A. Repeat vital signs.
- B. Must be done as part of the on-going patient assessment.
- C. Documentation of response to intervention.

SUGGESTED APPLICATION

Procedural (How)
Demonstrate reading labels and inspecting each medication that will be carried on the unit or assisted with by the patient.

Contextual (When, Where, Why)
For years the primary medication used by the EMT was oxygen. The EMT-Basic may have activated charcoal, syrup of Ipecac**,** oral glucose and an epinephrine auto-injector on the unit to administer with medical direction. In addition, the EMT-Basic will be able to assist patients with several medications, again under the supervision of medical direction.

This pharmacology lesson will assist you in understanding basic components for each of the medications. In later lessons, you will obtain additional knowledge and skills concerning their administration.

S))))))

STUDENT ACTIVITIES

Auditory (Hear)
1. The student will hear information on medications they will use on the EMS unit.

Visual (See)
1. The student will see each type of medication they will use on the EMS unit.

Kinesthetic (Do)
1. The student will practice inspecting and reading the labels of each type of medication they will use on the EMS unit.

INSTRUCTOR ACTIVITIES

Supervise student practice.
Reinforce student progress in cognitive, affective, and psychomotor domains.
Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., examinations, verbal reviews, handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

SUGGESTED ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.