

GUIDE

College Laboratory
Nursing II: Fundamentals
57102

Spring, 2007
Week 1

PROMOTION OF FLUID BALANCE

PART I

I. BEHAVIORAL OBJECTIVES:

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

1. assess the nursing care needs of the client receiving IV therapy.
2. identify selected nursing diagnoses and expected outcome for the client receiving IV therapy.
3. plan expected outcomes for the client receiving IV therapy.
4. perform selected nursing interventions R/T the care of the client receiving IV therapy.
 - a. change an intravenous container without changing the tubing.
 - b. calculate IV flow rate.
 - c. calculate LIB and amount absorbed.
 - d. set up, program and use IV pump.
5. evaluate the effectiveness of stated outcomes.

II. ACTIVITIES:

Activity 1 (20 minutes)

1. Orientation to Nursing II college laboratory.
2. Review of ground rules and skill performance evaluation.

Activity 2 (25 minutes)

1. View CD - Administering IV Fluid Therapy (Mosby 2003)

Activity 3

1. **Assessments** (60 minutes)

- a. The instructor will review:
 - (1) preparing an intravenous solution with macro drip tubing
 - (2) computing flow rate
 - (3) changing an IV bag when empty
- b. View CD - Alaris Medical Systems - Gemini PC - 2 TX infusion system
 - (1) Instructor will guide students in use of pump

2. Data Analysis

Identification of a common nursing diagnosis and expected outcome for the client receiving IV therapy.

- (1) Risk for infection R/T interruption of skin integrity.

3. Expected Outcome

- (1) Client remains free of infection as evidenced by VS WNL during invasive therapy.

4. Nursing Interventions (45 minutes total)

a. Students will demonstrate:

- (1) using the skill performance evaluation as a guide, setting up the equipment for primary IV administration set
- (2) regulating the flow rate for primary administration set
- (3) changing an IV bag when empty
- (4) programming and using an IV pump

b. Compute IV flow rates.

- (1) Students can take home and complete the math exercises for computing the flow of an IV.

c. Students will document care of the client receiving IV therapy.

(1) Include the following:

- A Location and status of IV site, dressing, fluids and tubing. Size and type of catheter/needle. Reports of pain.
- I IV site care rendered, tubing, IV fluid or catheter changes. Client teaching.
- E Continued patency and infusion of IV therapy. Client tolerance to care. Client demonstration of previous teaching.

(2) Sample

DATE TIME IV of 1000 cc's D5W; infusing at Rt. lower arm @
125 cc/hr. #20 Jelco present.
IV tubing changed and site care given.
Site clean _s swelling or redness. o c/o pain.
Reinforced teaching regarding mobility limitations;
understanding demonstrated.

Sign with title

d. Student will document IV solution infused on I&O sheet.

5. Evaluation

- (1) No signs or symptoms of infection present.

Activity 4

NOTE: ADMINISTERING MEDICATIONS VIA NG TUBE, INTRAVENOUS PIGGYBACK MEDICATIONS, DRESSING CHANGE, AND URINARY CATHETERIZATION ARE SKILLS TO BE EVALUATED. THE SKILL PERFORMANCE EVALUATION SHEETS ARE IN THIS GUIDE.

READING REFERENCES:

Unless otherwise stated, all readings for the multisensory laboratory are from Evans - Smith, Taylor's Clinical Nursing Skills, 2005.

Week 1

Skill Technique Review:

Intravenous Therapy, Chapter 15, p. 629 - 632; 641 - 651, Omit IV calculations on p. 635.

Daniels & Smith, Clinical Calculations - A Unified Approach, 5th Edition, Chapter 10, "Calculations of Intravenous Medications and Solutions," p. 146-152 and p. 159 - 167.

REMINDER: BRING YOUR PRACTICE KIT TO WEEKS 2 AND 3 COLLEGE LABS.