

Critical care rotation VA Medical cent,
Miami, Florida Margareth Larose,
Pharm.D.

GOALS AND RESPONSIBILITIES:

To provide an orientation to the special pharmacotherapeutic needs for critically-ill patients residing in an intensive care unit. Residents and students will gain experience in the provision of clinical pharmacy services for the intensive care team.

AREAS OF INSTRUCTION:

Didactic discussions, reading assignments, case presentations, written assignments and direct patient care experience will allow the student to understand and appreciate the implications of pharmacotherapy on the following areas of emphasis:

1. Hemodynamic and physiologic monitoring
2. Shock and related problems
3. Pulmonary disease
4. Fluid and electrolytes and other intravenous therapy
5. Cardiovascular diseases and therapy
6. Neurology
7. Nutrition and gastrointestinal implications
8. Endocrine involvement
9. Hematology

STUDENT ACTIVITIES:

1. Attend ICU team rounds
2. Review drug regimens to ensure appropriate pharmacotherapy
3. Provide oral and written therapeutic consultations to members of the intensive care unit
4. Review patient cases with preceptor on a daily basis
5. Provide one journal club presentation to the clinical pharmacy staff
6. Present one formal patient case to the clinical pharmacy staff
7. Present at least one in-service in a related area of instruction to the unit staff

LEARNING OBJECTIVES:

Upon completion of the rotation, the student should demonstrate competency in:

1. Integrating the pharmacologic needs of the patient with other aspects of patient care delivery by the critical care team by:
 - a. participating in rounds and discussing the pathophysiology of commonly encountered acute medical problems with physicians and other health care providers
 - b. monitoring the progression of diseases or effects of therapy by using clinical symptoms, laboratory data, information generated by hemodynamic monitoring techniques and other relevant data
 - c. anticipating therapeutic dilemmas and formulating appropriate alternatives
 - d. developing therapeutic priorities for the acute and chronic problems encountered in critically-ill patients
 - e. applying pharmacokinetic and pharmacodynamic principles to the critically-ill patient and recommending serum drug concentration sampling times to achieve cost-effective drug monitoring and dosing regimens
 - f. determining the need for fluid and electrolyte therapy, and recommending appropriate diluents and admixture concentrations to meet patient-specific needs

- g. balancing efficacy data with information on drug cost and other formulary considerations when recommending therapeutic alternatives
- h. demonstrating skills in writing progress notes and consultations pertaining to drug therapy selection, pharmacokinetics, nutrition support, toxicology and therapeutic monitoring
- i. working with the nursing staff to ensure the safe and accurate administration of drugs
- j. preventing common physical and chemical drug incompatibilities

2. Management of time by prioritizing activities

3. Professionalism including abiding to hospital policies and procedures (including dress code)

4. Accomplishment of all assignments and exams

GRADING

A=90- 100

B=80- 89

C=70- 79

The final grade is based on accomplishment of all assignments in a timely manner. Areas graded include: active participation in all activities required, demonstration of appropriate competency in all areas, professionalism, knowledge base, presentation and writing skills, and obtaining a passing grade in all exams.