NUR 213
Infection
Septicemia

**Description:** This module further develops understanding of the concept of infection and its management by exploring factors associated with the invasion of blood by microorganisms and its potential to cause serious illness including progression to septic shock, DIC and death.

**Learning Outcomes:**
Upon completion of this module the student will be able to:

1. Identify the underlying pathophysiology of septicemia.
2. Differentiate between infection, septicemia and septic shock.
3. Identify the assessment findings and diagnostic tools that contribute to medical and nursing diagnoses associated with septicemia.
4. Discuss the mortality rate and cost implications of progression of an infection into septicemia.
5. Discuss potential sites of origin, risk factors for development, and the association of septicemia with meningitis.
6. Differentiate the signs and symptoms of a patient with an infection versus septicemia versus septic shock.
7. Describe key preventative strategies for development of septicemia.
8. Discuss specific treatment and nursing interventions for the patient with septicemia.
9. Identify complications including septic shock and disseminated intravascular coagulopathy (DIC)

**Learning Resources:**
Text: *NC ADN Textbook*, Volume ?, Chapter ?.

Websites: The nih and mayo sites are particularly good – I found the text books were lacking as far as a definitive section on sepsis – Iggy had only a few paragraphs. The recent studies section in the nih website is particularly interesting.

http://www.clevelandclinic.org/health/health-info/docs/3800/3887.asp?index=12361
http://www.umm.edu/ency/article/001355.htm
http://www.mayoclinic.com/health/sepsis/DS01004/DSECTION=1
http://www.mayoclinic.com/health/blood-poisoning/AN00716

**Learning Activities:**
Introductory lecture on septicemia

Handout/Concept Map on points related to septicemia
Table of Differentiation: To be completed by students in groups based on their texts, handouts and website visits (or as a “pre-assignment”) and then discussed in class with the instructor’s focus on helping student differentiate between the three so students can discern when a typical infection is progressing into a more serious complication. (This concept is suggested to be taught in close association with septic shock)

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<tr>
<th></th>
<th>Infection</th>
<th>Septicemia</th>
<th>Septic Shock</th>
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<tbody>
<tr>
<td>What is causing it?</td>
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<td>What exactly is happening in the body? (pathophysiology)</td>
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<td>What are the signs and symptoms?</td>
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<td>How is it diagnosed?</td>
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<td>What would make you think this condition is getting worse?</td>
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<td>What medications are likely to be used and how will they be administered?</td>
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<td>What interventions need to be done?</td>
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Lab activity: Set up 3-6 patients with various signs and symptoms and histories and have students “assess” each manikin and then determine which of the three above progression of infection the patient is in. (Give them a simplified “database” to complete on each patient)
Then make “grand rounds” on the patients to have students identify where the patient is according to the table and discuss their reasons and rationales for their decisions.
Then have students “treat” the patient – groups of students take their manikin and position, hang, fluids, put out medications or IVPB they would expect to have to do for the patient with septicemia.

**Evaluation:**
Unit exam
Lab competencies on identification of signs and symptoms and interventions exercise
Clinical Performance Evaluation