Mt. San Antonio College Associate Degree Nursing Curriculum Threads

Nutrition

Nutritional needs of patients vary individually and have a direct bearing on health status. Nurses are in the front line when it comes to identifying and addressing the nutritional needs of patients. It is the nurse's responsibility to ensure that patients in clinical facility are adequately fed and provided the correct diet for their condition and to aid optimum recovery. Nurses identifying a patient who is malnourished, or at risk of malnutrition, can initiate an early referral to a dietician, and can reduce morbidity rates. In providing nutritional care to patients, nurses must take environmental, developmental, and cultural variables into consideration. Nutrition is integrated Mt.SAC Nursing Program curriculum to ensure the coverage that nutrition is a vital component of care.

NURS 1A - The Nursing Process I

- 1. Assess and determine level of assistance needed by client in maintaining nutrition/fluid intake.
- 2. Demonstrate correct feeding techniques for clients with feeding self-care deficits (partial and total).
- 3. Accurately measure/record intake and output for client, as indicated.
- 4. Use resource persons and materials (manuals, and booklets) when needed to supplement own knowledge of dietary factors.
- 5. Accurately report and record client's current diet and the percentage/amount of food and fluids taken during care. Meal % and I&O.
- 6. Assist and encourage patient to feed self.
- 7. Discuss the different types of diets needed for different diagnosis.
- 8. Discuss the reason for using thickener in liquids.
- 9. Assess subjective and objective data (including laboratory data values of client) for clients with nutrition/hydration-problems

- 10. Identify changes in nutrition and fluid status in the elderly client.
- 11. Demonstrate knowledge of requirements for major nutrients, fluids, electrolytes by appropriately reporting signs and symptoms of alterations
- 12. Identify specific client knowledge deficits in the elderly client.
- 13. Identify and correctly utilizes appropriate equipment/devices and modifications to ensure adequate intake of fluids and nutrients

NURS 1B - The Nursing Process II

- 1. List factors, which affect the average adult's fluid and electrolyte status.
- 2. State the average adult daily fluid intake and how it is acquired.
- 3. Describe implement nursing preventions to facilitate client's fluid intake as needed.
- 4. State the average adult daily fluid output, including routes and amt. of each route. Include sensible and insensible output.
- 5. Identify and report clients with inadequate urinary output (less than 30 cc/hr.)
- 6. Identify information to obtain in a health history to assess client's fluid and electrolyte balance.
- 7. Be aware of client's laboratory data relative to fluid/electrolyte, acid-base balance and nutritional status and can state how these are evidenced by client problems signs and symptoms.
- 8. Identify role of parenteral fluid/electrolytes nutrient therapy in meeting nutritional needs of assigned client.
- 9. Know and be able to state the rate of administration for I.V. solutions. This includes ordered rates, textbook and manufacturer's recommendations.
- 10. Identify adverse reactions related to I. V. fluid administration and state safety factors to minimize these reactions.
- 11. Assess the I.V. site for untoward signs/symptoms of infiltration, inflammation.
- 12. Describe clients at risk and risk factors, which may predispose individuals to fluid volume deficit (FVD), fluid volume excess (FVE) and common electrolyte imbalances.
- 13. Assess assigned clients, by history and physical exam, for clinical signs of FVD and FVE. Report to professor/staff as needed.
- 14. Identify nursing preventions to strengthen lines of resistance in clients with FVD, FVE and common electrolyte imbalances.
- 15. State normal laboratory electrolyte values of adults and variations of the elderly.

- 16. Act as an advocate and liaison with nursing team members, other disciplines, family members/significant others and physician to enhance client's dietary intake.
- 17. Verbalize knowledge of minimum daily requirements of food groups in normal daily diet.
- 18. Be able to describe food/fluids permitted for assigned client's prescribed diet.
- 19. Plan for potential fluid/ electrolyte problems in clients on various drug therapies (e.g., diuretics, corticosteroids) and assess client for signs/symptoms of problems.
- 20. State symptoms of excessive hydration, pulmonary edema or other expected or potential reactions to commonly used I.V. solutions in excessive amounts.
- 21. Evaluate incompatibilities when mixing drugs with foods and/or other drugs; calls attention to contraindications and incompatibilities by reporting them to team leader and professor.
- 22. Define usual signs and symptoms such as inflammation, pyrexia, febrile, atrophy, hypertrophy, hyperplasia, neoplasia, nausea, vomiting, hypertonic vs. hypotonic states, and the like.
- 23. Identify nutritional needs and perform skill to assist with the Adult/Geriatric Patient:
 - **a.** Feeds patient with 100% accuracy.
 - **b.** Accurately measures meal percentage eaten and record.
 - **c.** Accurately measures liquid intake and record.
 - **d.** Assist and encourage patient to feed self.
- 24. Assess subjective and objective data (including laboratory data values of client) for clients with nutrition/hydration problems.
- 25. Identify primary, secondary and tertiary preventions for nutrition needs/problems, including those associated with fluid/electrolyte imbalances and other health care disorders common to adults, including the elderly.
- 26. Demonstrate knowledge of requirements for major nutrients, fluids, electrolytes by appropriately reporting signs and symptoms of alterations.
- 27. Identify specific client knowledge deficits and implements teaching to caregiver(s), significant other(s) and/or client.

- 28. Identify and correctly utilizes appropriate equipment/devices and modifications to ensure adequate intake of fluids and nutrients.
- 29. Monitor clients receiving nutrition, hydration, fluids/ electrolytes via enteral, or intravenous/ hyperalimination.

NURS 3 – Medical-Surgical Nursing - Locomotion/Sensation/Integument/Oncology/Immunology

- 1. Using the principles of pain management and diet therapy, identify and implement primary, secondary, and tertiary preventions for various musculoskeletal conditions.
- 2. Identify primary, secondary and tertiary preventions for nutrition needs/problems, including those associated with fluid/electrolyte, acid/base changes and other health care disorders common to adults, including the elderly.
- 3. Demonstrate knowledge of requirements for major nutrients, fluids, and electrolytes by actions to resolve deficits and appropriately reporting abnormal findings.
- 4. Select and utilizes appropriate equipment/devices and modifications to ensure adequate intake of fluids and nutrients. (IV or Enteral).
- 5. Assess subjective and objective data (including laboratory data values of client) for clients with nutrition/hydration-problems
- 6. Identify primary, secondary and tertiary preventions for nutrition needs/problems, including those associated with fluid/electrolyte, acid/base imbalances and other health care disorders common to adults, including the elderly.
- 7. Demonstrate knowledge of requirements for major nutrients, fluids, and electrolytes by actions to resolve deficits and appropriately reporting abnormal findings
- 8. Identify specific client knowledge deficits and implements teaching to caregiver(s), significant other(s) and/or client.
- 9. Identify and correctly utilizes appropriate equipment/devices and modifications to ensure adequate intake of fluids and nutrients
- 10. Monitor clients receiving nutrition, hydration, fluids/ electrolytes via enteral, or intravenous/ hyperalimination

NURS 4 – Maternity Nursing

- 1. Assist the mother with bottle and breast-feeding and initiate referrals as appropriate.
- 2. Teach proper nutrition to female patients based on their age, culture and ethnic practices.
- 3. Provide nutritional instruction relative to gestation, culture/ethnicity and current status (normal progress without any complications or pre-existing conditions.)
- 4. Demonstrate proper feeding and burping techniques for the newborn.
- 5. Explain infant nutritional needs to a new mother.
- 6. Identify primary, secondary, and tertiary preventions for nutrition needs/problems as it relates to newborns and women in all phases of the childbearing cycle.
- 7. Identify specific knowledge deficits and institutes teaching to client and significant other(s).
- 8. Assess subjective and objective data (including laboratory data values of client) for clients with nutrition/hydration problems
- 9. Identify elimination problems and acts to resolve these in an appropriate manner considering clients obstetrical history.
- 10. Demonstrate knowledge of requirements for nutrients, fluids, electrolytes by actions to resolve deficits and appropriately reporting abnormal findings as it relates to newborns and women in all phases of the childbearing cycle
- 11. Identify and correctly utilizes appropriate equipment/devices and modifications to ensure adequate intake of fluids and nutrients
- 12. Monitor clients receiving nutrition, hydration, fluids/ electrolytes via enteral, or intravenous/ hyperalimination as it relates to newborns and women in all phases of the childbearing cycle

NURS 5 – Psychiatric Nursing

- 1. Assess subjective and objective data (including laboratory data values of client) for clients with nutrition/hydration problems.
- 2. Identify primary, secondary, and tertiary preventions for nutritional needs/problems as they relate to the clients Psychiatre diagnosis and condition
- 3. Demonstrate knowledge of requirements for nutrients, fluids, electrolytes by actions to resolve deficits and appropriately reporting abnormal findings as specific to the psychiatric client
- 4. Identify specific knowledge deficits and implements teaching to parent(s), caregiver(s), significant other(s) and/or client
- 5. Identify and correctly utilizes appropriate equipment/devices and modifications to ensure adequate intake of fluids and nutrients Monitors clients receiving nutrition, hydration, fluids/ electrolytes in the psychiatric client
- 6. Establish short and long term goals for the client's nutritional needs and includes client and family teaching as part of discharge planning.

NURS 6 – Pediatric Nursing

- 1. List three areas that are evaluated as part of nutritional assessment.
- 2. Provide parents with feeding recommendations.
- 3. Identify children at increased risk of developing nutritional disorders.
- 4. Outline a nutritional counseling plan for vitamin or mineral deficiency or excess.
- 5. Outline a dietary plan for parents when the infant has a cow's milk intolerance.
- 6. Recognize the feeding patterns of preschoolers.
- 7. Outline a plan of care for the adolescent with an eating disorder.
- 8. Implement feeding techniques that encourage food and fluid intake.
- 9. Describe the procedures involved in providing nutrition via gavage, gastrostomy, and parental routes.
- 10. Identify nutritional therapies for the child with a malabsorption syndrome.
- 11. Assess subjective and objective data (including laboratory data values of client) for clients with nutrition/hydration-problems.
- 12. Identify primary, secondary and tertiary preventions for nutrition needs/problems, including those associated with fluid/electrolyte, acid/base changes, specific to the pediatric patient.
- 13. Demonstrate knowledge of requirements for nutrients, fluids, electrolytes by actions to resolve deficits and appropriately reporting abnormal findings as specific to the pediatric client.
- 14. Identify specific knowledge deficits and implements teaching to parent(s), caregiver(s), significant other(s) and/or client.
- 15. Identify and correctly utilizes age appropriate techniques for feedings and nutritional intake.
- 16. Monitor clients receiving nutrition, hydration, fluids/ electrolytes via enteral, or intravenous/ hyperalimination in the pediatric client.

NURS 7 – Medical-Surgical Nursing – Nutrition / Elimination / Surgical Asepsis

- 1. Explain the secondary prevention techniques of diet therapy for clients undergoing surgical intervention.
- 2. List the variables which could contribute to fluid and electrolyte imbalances in the body.
- 3. Plan and implement primary and secondary prevention techniques in given theoretical situations, aimed at resolving potential or actual problems related to fluid and electrolyte imbalance.
- 4. Describe the composition of the major body fluid compartments.
- 5. Define the following processes involved in the regulation of movement of water and electrolytes between the body fluid compartments: Diffusion, osmosis, filtration, hydrostatic pressure, oncotic pressure, and osmotic pressure.
- 6. Describe the etiology, laboratory diagnostic findings, clinical manifestations, and nursing and collaborative management of the following disorders:
 - a. Extracellular fluid volume imbalances: Fluid volume deficit and fluid volume excess
 - b. Sodium imbalances: Hypernatremia and hyponatremia
 - c. Potassium imbalances: Hyperkalemia and hypokalemia
 - d. Magnesium imbalances: Hypermagnesemia and hypomagnesemia
 - e. Calcium imbalances: Hypercalcemia and hypocalcemia
 - f. Phosphate imbalances: Hyperphosphatemia and hypophosphatemia
- 7. Identify the processes to maintain acid-base balance.
- 8. Discuss the etiology, laboratory diagnostic findings, clinical manifestations, and nursing and collaborative management of the following acid-base imbalances:
 Metabolic acidosis, metabolic alkalosis, respiratory acidosis, and respiratory alkalosis.
- 9. Describe the composition and indications of common intravenous fluid solutions.

- 10. List the most common gastrointestinal problems that occur with aging and appropriately relate the treatment for each.
- 11. List factors that contribute to constipation in the adult and elderly client.
- 12. Explain the alternatives to administration of oral foods and fluids.
- 13. Discuss the rationale for the loss of appetite and poor eating habits in older persons.
- 14. Describe the essential components of a nutritionally good diet and their importance to health.
- 15. Describe possible adverse interactions between drugs and various foods.
- 16. Describe the common etiologic factors, clinical manifestations, and management of malnutrition.
- 17. Explain the indications for use, complications, and nursing management of tube feedings.
- 18. Describe the types of feeding tubes and related nursing management. Define the indications, complications, and nursing management related to the use of parenteral nutrition.
- 19. Compare the etiologic factors, clinical manifestations, and nursing management of eating disorders.
- 20. Describe and evaluate the variables that adversely affect the maintenance of nutrition.
- 21. Discuss anatomy, physiology, pathophysiology, mental health and other related principles of care for clients with nutrition problems.
- 22. Plan and implement secondary prevention techniques in given theoretical situations, aimed at solving client's nutritional problems.
- 23. Describe the types of malabsorption syndrome and collaborative care of celiac disease, lactase deficiency, and short bowel syndrome.
- 24. Develop nursing diagnoses utilizing the PES format which correctly identify nutrition and elimination problems amenable to nursing intervention
- 25. Assess subjective and objective data (including laboratory data values of client) for clients with nutrition/hydration/elimination problems.

- 26. Identify primary, secondary, and tertiary preventions for nutrition needs/problems in clients with nutrition/elimination disturbances, including those associated with fluid/electrolyte, acid-base changes.
- 27. Demonstrate knowledge of requirements for major nutrients, fluids, electrolytes by actions to resolve deficits, appropriately reporting abnormal findings for acutely ill client.
- 28. Select and utilize appropriate equipment/devices and modifications to ensure adequate intake of fluids and nutrients.
- 29. Identify specific knowledge deficits and institutes teaching to client and significant other(s).
- 30. Provide for nutritional, hydration, fluid/electrolyte requirements including enteral, intravenous and hyperalimination.
- 31. Assess elimination status of client and follows established protocol(s) for providing elimination by natural or modified means.
- 32. Teach clients about problems of elimination that relate to urinary and bowel diversion.
- 33. Assess subjective and objective data (including laboratory data values of client) for clients with nutrition/hydration_problems.
- 34. Identify primary, secondary and tertiary preventions for nutrition needs/problems, including those associated with fluid/electrolyte, acid/base changes in the acutely ill med/ surg client.
- 35. Demonstrate knowledge of requirements for major nutrients, fluids, electrolytes by actions to resolve deficits, appropriately reporting abnormal findings for acutely ill client.
- 36. Identify specific knowledge deficits and institutes teaching to client, caregivers and significant other(s).
- 37. Identify and correctly utilizes appropriate equipment/devices and modifications to ensure adequate intake of fluids and nutrients.
- 38. Provide for nutritional, hydration, fluid/electrolyte requirements including enteral, intravenous and hyperalimination.

NURS 8- Medical-Surgical Nursing - Circulation and Oxygenation

- 1. Describe and evaluate the variables that adversely affect the maintenance of nutrition, including cultural diversity, and plan and implement secondary prevention techniques aimed at solving nutrition problems.
- 2. Assess skin for temperature, color [pallor, flushed, cyanotic, ashen, diaphoresis, cold-clammy, warm-dry, ecchymotic, petechiae], state of hydration, presence/absence of edema.
- 3. Keep accurate record of intake/output as indicated; observe for changes in body weight in relation to fluid loss/retention.
- 4. Be aware of normal bowel elimination pattern for client, as well as recent elimination for client assigned.
- 5. Explain diet/fluid modifications prescribed for client, including foods and fluids that are prohibited or allowed; use knowledge in teaching clients.
- 6. Assess client for signs/symptoms of fluid excess/deficit and report findings accurately.
- 7. Identify client problems and integrate factors relating to cardiovascular, renal, respiratory, neuro-endocrine, integumentary, musculoskeletal and gastrointestinal systems as well as fluid/electrolyte and acid/base findings when planning client care and proposing potential solutions/interventions to problems.
- 8. Identify factors relative to cardiorespiratory surgery which influence oxygenation/circulation and related problems.
- 9. Identify common forms of cancer of upper airway and state common interventions for the specific types and sites.
- 10. Describe medications being administered to assigned client, the reasons for their being administered to this client, their actions, dosage range, method of administration, side effects, contraindications, and any necessary precautions for safe administration
- 11. Explain blood gas analysis and its relationship to client who has respiratory problem.

- 12. Explain physiologic alterations in RBC formation in clients with COPD.
- 13. Demonstrate awareness, through nursing care, of problems of clients with chronic pulmonary disease with regard to age and developmental tasks.
- 14. Identify the common types of cancer of the lower airways and describe/explain the common interventions for them.
- 15. Correlate respiratory disease signs/symptoms with non-respiratory findings [eg., alterations in mental processes, hematologic reports, blood pressure, pulse rate] and altered system conditions [eg., cardiac, hepatic, renal, gastrointestinal, neurological, endocrine] and explain relationships between the systemic alterations and the respiratory condition.
- 16. Identify the physiological and developmental stage of the client and contrast the observed physiology and developmental stage with that of the theoretical state for someone in the client's age range.
- 17. Assess subjective and objective data (including laboratory data values of client) for clients with nutrition/hydration problems
- 18. Identify primary, secondary, and tertiary preventions for nutrition needs/problems in clients with ventilation, oxygenation, and circulation disturbances, including those associated with fluid/electrolyte, acid-base changes
- 19. Demonstrate knowledge of requirements for major nutrients, fluids, electrolytes by actions to resolve deficits, appropriately reporting abnormal findings for critically ill client.
- 20. Identify specific knowledge deficits and institutes teach caregiver(s), ing to client, and significant other(s).
- 21. Identify and correctly utilizes appropriate equipment/devices and modifications to ensure adequate intake of fluids and nutrients.
- 22. Monitor clients receiving nutrition, hydration, fluids/ electrolytes via enteral, or intravenous/hyperalimination in the critically ill client.

NURS 10 – Medical-Surgical Nursing – Integration/Regulation

- 1. Explain diet/fluid modifications prescribed for client, including foods and fluids that are prohibited or allowed; use knowledge in teaching clients.
- 2. Assess client for sign/symptoms of fluid excess/deficit and report findings accurately.
- 3. Describe nutritional considerations in neurological disorders.
- 4. Assess subjective and objective data (including laboratory data values of client) for clients with nutrition/hydration-problems.
- 5. Identify primary, secondary, and tertiary preventions for nutrition needs/problems in clients with endocrine, integration, and regulation disturbances, including those associated with fluid/electrolyte acid-base changes.
- 6. Demonstrate knowledge of requirements for major nutrients, fluids, electrolytes by actions to resolve deficits, appropriately reporting abnormal findings for critically ill client.
- 7. Identify specific knowledge deficits and institutes teaching to client caregiver(s),, and significant other(s).
- 8. Identify and correctly utilize appropriate equipment/devices and modifications to ensure adequate intake of fluids and nutrients
- 9. Monitor clients receiving nutrition, hydration, fluids/ electrolytes via enteral, or intravenous/hyperalimination in the critically ill client.

NURS 11 – Preceptorship in Nursing

Objectives

In addition to laboratory objectives from previous courses (which include personal hygiene, human sexuality, cultural diversity, nutrition, pharmacology, legal aspects, social/ethical aspects, management/leadership threads) the laboratory objectives are as follows:

- 1. Utilizing nursing knowledge, skills and protocols to assure an environment conducive to restoration and maintenance of clients in clinical settings, including medical surgical settings and any areas where clinical objectives can be met, the preceptee will:
 - a. Apply theoretical base to clinical practice.
 - b. Demonstrate effective interpersonal communication skills.
 - c. Demonstrate skills in written communication.
 - d. Demonstrate professional accountability.
 - e. Demonstrate application of the nursing process.
 - f. Demonstrate clinical skills appropriate to entry-level practitioner.
 - g. Demonstrate increasing skills in decision-making, priority setting, problem solving and organization.
 - h. Demonstrate leadership skills.
 - i. Demonstrate problem solving and skill attainment.
 - j. Demonstrate critical thinking.