SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: **NURSING PRACTICE THEORY** *2B*

Code No.:   NUR 224-4

Program: NURSiriG

Semester: FOUR

Ddte: 1984-1985

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SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

DIPLOMA NURSING PROGRAM

NURSING PRACTICE THEORY -*K'^-^^^^^^"^-*

UNIT: OXYGEN AND CIRCULATION

YEAR 2. SEMESTER 4   1984-85

Required Readings:

1. Whaley and Wong. Nursing Care of Infants and Children. Mosby. 2nd ed.

        Chapters 32
                 33
                 35
                 36

2. Brunner and Suddarth1. Medical-Surgical Nursing. Lippincott. 1984.

        Chapters 5 – pp. – 63- 69
                          – 71- 78
                 22 - pp. - 421-431
                 23 - pp. - 439-452
                 24 - pp. - 454-465
                          - 468-471
                 25
                 26 - pp. - 507-532
                          - 537-541
                 27 – pp. - 547-562
                 28 – pp- - 584-593
                          - 598-604
                 29
                 30
                 31 – pp- - 626-644
                          - 647-556
                 32

1984-85

OBJECTIVES	CONTENT GUIDE	LEARNING ACTIVITIES

Given case situations illustrating clients responses the student will be able to:

ASSESSMENT

1. Demonstrate first level assessment of ineffective responses associated with alterations in oKygen and circulation.

A. OXYGEN RESPONSES

^' Respirations (see 1st year)
- alterations in respiratory patterns
- secretions
- pain on inspiration/expiration
- breath sounds
    - vesicular
    - bronchovesicular
    - bronchial
    - adventitious

Chest/Thorax
- shape - concave/convex
- scars
- crepitation

2. Responses in Other Modes

a) Exercise and Rest
" posture/positioning
- response to activity/stress
- fatigue, lethargy
- alterations in sleep patterns
- skin: trophic changes, cyanosis eg. circumoral pallor
- extremeties: clubbing

OBJECTIVES	CONTENT GUIDE	LEARNING ACTIVITIES

b) Nutrition
   - alteration in eating patterns

c) <u>Neuro</u>
   - changes in level of conscious-
     ness/mental functioning
   - Irritability, restlessness
   - pupil activity

d) <u>Fluid and Electrolytes</u>
   - respiratory/metabolic -
     alkalosis/acidosis

^^ <u>interdependence</u>
   - changes in speech patterns
     (verbal, nonverbal)
   - Increased dependence

f) <u>Role Function</u>
   - changes in role behaviours

g) <u>Self Concept</u>
   - powerlessness
   - fear
   - loss '
   - anxiety
   - guilt

3. <u>Diagnostic Tests</u>
   - sputum/nasal/throat specimen
   - arterial blood gases
   - venous blood specimens: CBC,
     lytes
   - pulmonary function tests

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- chest x-ray
- lung scan
- lung biopsy
- thorarnntesis

4- Subjective Complaints

B. CIRCULATION

1. a) Pulse: (see 1st year)
     – PMI
     - arrythmias
   b) Heart
     - heart sounds
     - venous distention,
       eg. jugular
   c) Blood Pressure
     - hyper/hypo
     - idiopathic/postural
   d) Blood/Fluid Loss
     - amount
     - colour
     - origin

2. Responses in Other Modes

   Exercise and Rest
   Isee oxygen responses)
     - skin: changes in colour,
       temperature, perspiration,
       size of body part, changes
       in hair growth
     - extremeties: clubbing,
       muscle atrophy/spasm
     - nails: colour, thickening,
       blanching

OBjecTives   CONTEMT   fiUIDL
                                                                   LEARNING ACTIVITIES

Nutrition
- altered nutritional require-
  ments/eating pattern

Neuro
(see oxygen responses)

Elimination
- increase/decrease of
  urinary output
- altered bowel patterns

Fluid and Electrolytes
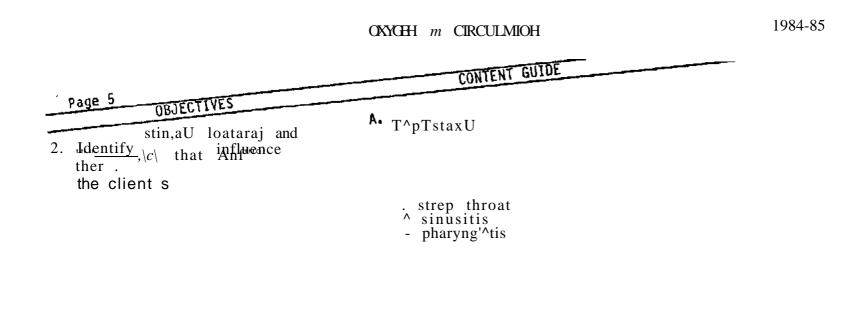(see oxygen responses)
- venous distention
- edema

Sensory
- pain-intermittent
  claudication, angina,
  myocardial, headache,
  Homan's Sign
- numbness
- tingling
- paresthesia

3, DiagnQstic Tests

- heart catheterization
- echocardiogram
- electrocardiogram
- angiogram
- stress test
- doppler
- chest X-ray
- venous blood specimens:
  cardiac enzymes, CBC-
  differential, electrolytes

CONTENT GUIDE

OBJECTIVES

A. T^pTstaxU

2. Identify stin,aU loataraj and
   ther .,\c\ that Anf influence
   the client s

. strep throat
^ sinusitis
- pharyng'^tis

- croup
- aspiration
_ pneuiTftonia
- asthma

- empyema
, bronchiectosis
- COPO
. bronchitis

OBJECTIVES	CONTENT GUIbE	LEARtJKJG ACtlVltlES-

B. <u>Circulation</u>   *

   - myocardial infarction

   - myocardial Ischemia

   - cardiac arrythmias

   - congestive heart failure

   - congenital heart disease

    - aryanotic defects

    - cyanotic defects

   - cor pulmonale

   - pulmonary edema

   - angina

   - diseases of the arteries

   - vein disorders

   - lymphatic disorders

   - hypertension

   - rhuematic fever

   - hemorrhage

   - ASHD

   - thrombosis, phlebitis

1. Health Care Delivery
   - blood component changes
System
   - antigen-antibody reaction
   - surgery
   - drug overdose
   - Invasive techniques
C. External
   - drug therapy (see below)

<u>Oxygen</u>
   - bronchodilators, expectorants,
    antitussives, antibiotics,
    decongestants

OBJECTIVES	CONTENT GUIDE	LEARNING ACTIVITIES

Circulation
-cardiotonic glycosides, anti-
  arrythmlcs, antihypertensives/
  diuretics, vasodilators,
  adrenergics, anticoagulants,
  spasmolytics, Rho Gam

3. Demonstrate how to determine
   the adaptation level of the
   client.

4. Identify essential responses
   and stimuli related to each
   nursing diagnosis.

5. Identify nursing diagnoses   1, Oxygen
   that are consistent with and   a) Ineffective airway clearance
   supported by assessment data   b) Ineffective breathing patterns

                                    2. **Circulation**
                                       a) Alteration of cardiac output
                                       b) Alteration in peripheral/cerebral
                                          perfusion
                                       c) Potential/Actual hemorrhage

PLANNING

   Determine goals that will change   a) maintenance of oxygen to all
   ineffective behaviours and re-   cells
   inforce behaviours which promote   b) **prevention of physical injury
   or maintain adaptation in oxygen   as a result of cardiovascular
   and circulation.   Inefficiency**
                                       c) maintenance of a balance of
                                          exercise and rest specific to
                                          the ind^v dual

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                    OBJECTIVES   CONTENT fiUlDE   LEARNtWfi ACTIVITIES

                                                d) an awareness of learning
                                                   needs and alternate avenues
                                                   in lifestyle

INTERVENTION   A. Data

7. Identify nursing Interventions   1. Physical Assessment
    and demonstrate selected skills   - interview
    that assist the client to regain   - Inspection/observation
    adaptation In oxygen and   - palpation
    circulation.   - auscultation

                                                2. Chart
                                                   - physician's notes
                                                   - lab tests

                                                3. Family/Significant Others
                                                    - pertinent Information

                                                B.Therapeutic

                                                1. IV infusion therapy
                                                       - blood
                                                       - plasma
                                                       - packed cells
                                                       - platelets
                                                   Awareness of adverse reactions
                                                   to blood transfusion therapy
                                                   with appropriate treatment

                                                2. Preparation for specific
                                                   diagnostic procedures, eg.
                                                       - bronchoscopy
                                                       - echocardiogram
                                                       - stress test

- pulmonary function test
- bone marrow

3. Provision of oxygen therapy
- mask
- cannula
- catheter

4. Provision of postural drainage
- clapping
- vibration
- positioning

5. Suctioning techniques
- nasal
- oral
- oropharyngeal
- nasopharyngeal

6. Promotion of blood flow and venous return
- positioning of client
- elastic stockings, ace bandages
- application of heat and cold
- rotating tourniquets

7. Pre and post-op management specific to vascular surgery

8. Nursing implications involved with the administration of drug therapy   '

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OBJECTIVES   CONTENT GUIDE
LEARNING ACTIVITIES

C. <u>Teaching</u>

   Education of family members
      ie. CPR
   Promotion of adequate circulation
   Pursed-lip breathing
   Abdominal diaphragmatic
      breathing
   Drugs
   Increasing activity regime
   Diet
   Risk Factors

D. <u>Referrals</u>

   Canadian/Ontario Heart Foundation
   Algoma Lung Association
   Canadian Cancer Society
   Algoma Interagency Council on
      Smoking
   PHN
   Physiotherapist
   Respiratory therapist
   YMCA - post MI rehab program

8. Identify which of the above
   nursing interventions are
   independent or interdependent
   functions.

EVALUATION

9. Evaluate outcome of nursing
   interventions based on
   achievement of goals.

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