

SAULT COLLEGE NURSING ASSISTANT PROGRAMME

RNA 103

UNIT 8

OXYGEN AND CIRCULATION

PART A: RESPIRATIONS

PART B: PULSE AND BLOOD PRESSURE

September, 1993

OBJECTIVES

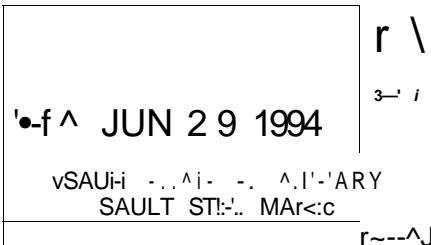
REFERENCES

Define each of the following terms:

Eupnea	Hypotension
Apnea	Bradycardia
Bradypnea	Tachycardia
Tachypnea	Manometer
dyspnea	EKG, ECG
Jrthopnea	Auscultation
Hypernea	Percussion
Cheyne-Stokes	Palpation
Pulse	Vital Signs
Hypertension	Peripheral circulation

Kozier, Erb & Olivieri,
p. 334-353
p. 405-411
p. 1091-1153

Christensen,
p- 185-195



OBJECTIVES

REFERENCES

PART B: RESPIRATION
(OXYGENATION)

1. Define the terms:
 - Respiration
 - Internal Respiration
 - External Respiration
2. Outline reasons for assessing respirations.
3. Discuss the essential requirements for ventilation:
 - atmospheric oxygen
 - clear air passages
 - pulmonary expansion & recoil
4. Discuss regulation of respiration under the following headings:
 - respiratory centre
 - changes in O₂, CO₂ p_t
 - concentration of the blood
 - changes in arterial B.P.
 - joint movement (exercise)
5. Discuss factors that affect oxygen transport:
 - cardiac output
 - # of R.B.C.
 - exercise
6. Describe the types of breathing:
 - costal
 - diaphragmatic
7. Identify responses which indicate adaptation in Oxygen and Circulation
 - a) rate variation through the lifespan
 - b) depth
 - c) rhythm
 - d) effort versus comfort
 - e) amount of chest expansion
 - f) areas of movement/symmetry
 - g) sounds
 - h) cough/secretions
 - i) skin and mucous membrane:
 - colour
 - temperature
 - nail beds/shape

- Kozier, Erb & Olivieri,
p. 342
- Christenson, p. 187-8
- Kozier, Erb & Olivieri,
p. 1093
- Kozier, Erb & Olivieri,
p. 1095
- Kozier, Erb & Olivieri,
p. 1094-1095
- Kozier, Erb & Olivieri,
p. 342
- Kozier, Erb & Olivieri,
p. 325, 342,
343-344,
1097-1099,
1100
- Lab: Vital Signs
- For objectives relating to stimuli, nursing diagnoses, goals, interventions and evaluation, See Part B, attached.

OBJECTIVES

- j) posture/positioning
- k) activity level
 - response to activity
 - exercise
 - role fulfilment
- l) ability to sleep/rest
- m) nutritional status:
 - ability to eat
 - hydration
- n) elimination - output
- o) mental status - level of consciousness
- p) self-concept mode
 - anxiety
 - motivation

REFERENCES

OBJECTIVES

REFERENCES

PART B: PULSE AND BLOOD PRESSURE

1. Define the term "pulse".
2. Review the location of:
 - a) most commonly used pulse sites:
 - apical
 - radial
 - temporal
 - carotid
 - brachial
 - b) other pulse sites:
 - femoral
 - popliteal
 - dorsalis pedis
3. Identify when an apical reading is indicated instead of a radial reading:
 - various locations specific to age
4. Define the term "pulse deficit".
5. Define the terms "arterial blood pressure", "systolic pressure", "diastolic pressure".
6. Identify types of manometers used:
 - mercury
 - aneroid
 - doplar
7. Identify factors that control blood pressure:
 - cardiac output
 - blood volume
 - arterial walls
 - size of arterioles/capillaries
8. Describe variations in BP:
 - normal range
 - measurements of hypotension and hypertension
9. Discuss reasons for assessing pulse and B.P. together

- Kozier, Erb & Olivieri,
p. 334
- Christenson, p. 185-187
- Lab: Vital Signs
- Kozier, Erb & Olivieri,
p. 335-336
- Kozier, Erb & Olivieri,
p. 335
- Kozier, Erb & Olivieri,
p. 1101
- Kozier, Erb & Olivieri,
p. 344
- Christenson, p. 188-190
- Kozier, Erb & Olivieri,
p. 346-347
- Kozier, Erb & Olivieri,
p. 345-346
- Kozier, Erb & Olivieri,
p. 334-335

OBJECTIVES

REFERENCES

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|---|---|
| 10. Define "auscultatory gap". | Kozier, Erb & Olivieri,
p. 349 |
| 11. Define the term "tissue perfusion". | Kozier, Erb & Olivieri,
p. 410 |
| 12. Identify responses which indicate adaptation in circulation, (pulse and B.P.) | Kozier, Erb & Olivieri,
p. 325,
410-411 |
- a) pulse rate variations through the lifespan
 - b) BP. alterations through the lifespan
 - c) rhythm of pulse
 - d) volume of pulse
 - e) base-line BP. readings for assessment
 - f) skin:
 - colour
 - temp, variations
 - texture
 - hair growth
 - edema
 - g) nails:
 - colour
 - shape
 - capillary refill
 - h) mucous membrane:
 - colour
 - i) conjunctiva:
 - colour
 - j) activity level:
 - response to activity
 - muscle tone
 - exercise program
 - role function fulfilment
 - k) ability to sleep/rest
 - l) nutrition:
 - edema
 - specialist diets
 - m) urinary output & intake/balance
 - n) senses:
 - pain (Homan's Sign)
 - headache
 - visual changes
 - o) mental functioning
 - dizziness
 - electrolyte imbalance
 - p) self-concept mode:
 - anxiety
 - emotions
 - limitations

OBJECTIVES

13. Identify stimuli which influence adaptation in Oxygen & Circulation
- a) age
 - b) sex
 - c) race
 - d) activity level:
 - exercise program
 - posture
 - e) - muscle tone
 - lifestyle:
 - smoking
 - occupation
 - stress
 - nutrition:
 - height/weight ratio
 - hydration
 - g) - dietary habits
 - elimination - urinary output
 - fluid retention:
 - output decreased
 - i) - edema
 - cardiac status/health status
 - J)** - anemia
 - blood loss
 - 1) diurnal variations
 - pain
 - environment:
 - altitude
 - humidity
 - m) - temperature
 - ventilation
 - medications
 - self-concept mode, cyclical
 - nature of anxiety and
 - respiratory distress:
 - motivation
 - o) - stress
 - emotional status
 - availability of human and material resources
14. Recognize nursing diagnoses related to circulation and oxygen.
- a) Adaptive cardio-pulmonary functioning
 - b) Adaptive tissue perfusion (renal, cerebral, cardiopulmonary, gastrointestinal, peripheral)

REFERENCES

Kozier, Erb & Olivieri,
p. 335, 345,
1095-1097

Kozier, Erb & Olivieri,
p. 1102-1103,
1150

OBJECTIVES

REFERENCES

- c) Altered tissue perfusion
 - d) Ineffective breathing patterns
 - e) Ineffective airway clearance
15. Contribute to goal statements.
16. Identify and discuss nursing measures used to promote and maintain adaptation of Oxygen and Circulation.
- a) monitor resp. rate/type of breathing
 - monitor pulse
 - rate/rhythm/volume
 - e) monitor B.P.
 - organize care to conserve energy of client
 - e) recognize sources of error in BP assessment and correct errors.
 - report and chart findings:
 - when would you report findings and what specific findings would you report
 - g) monitor changes
 - h) comfort measures:
 - bathing
 - positioning
 - i) assist with breathing exercises:
 - deep breathing
 - coughing
 - j) maintain fluid
 - k) intake/environmental/hydration
 - measures to promote relaxation:
 - positioning
 - communication
 - reassurance
 - breathing
 - l) Lung Inflation Devices
 - m) percussion, vibration and postural drainage
 - n) suctioning
 - o) O₂ therapy
 - p) artificial airways
 - q) CPR
 - r) measures to promote peripheral circulation

Kozier, Erb & Olivieri,
p. 1105-1141

Lab: Vital Signs

Kozier, Erb & Olivieri,
p. 349-352

Kozier, Erb & Olivieri,
p. 352

Semester 2 Lab
Semester 2 Lab
Semester 2 Lab
Kozier, Erb & Olivieri,
p. 1131-1141

OBJECTIVES

s) health teaching:

- exercise
- lifestyle
- diagnostic tests
EKG
stress tests

17. Evaluate based on goal statements and modify plan of care if necessary.

REFERENCES

Kozier, Erb & Olivieri,
p. 1149