มหาวิทยาลัยราชภัฏนครปฐม

Adult and Geriatric Nursing Practicum 2

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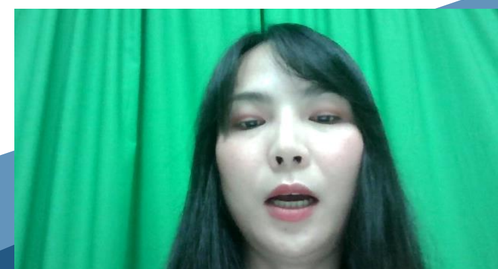
Course description

Practice nursing care for adults and the elderly in ill conditions using nursing processes in emergency, critical, acute and chronic care, internal medicine and surgery in the endocrine system, respiratory system, cardiovascular system, immune system, nervous system, infectious diseases, communicable and emerging diseases, using digital technology and related innovations in care, rational use of medicines, nutritional therapy, intercultural nursing, issues and trends in patient rights, human rights, law, ethics and related codes of conduct.

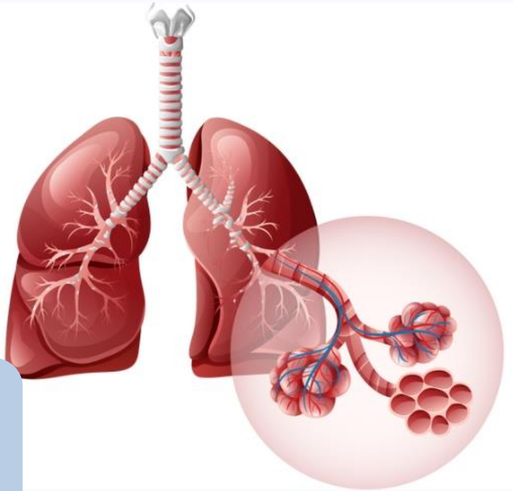


Learning objectives

1. Explain the principles of nursing practice for patients.
2. Explain the impact of critical illness.
3. Describe common diseases or conditions that lead to critical conditions.
4. Assessmet critically ill adult patients
5. Provide nursing care to critically ill adult patients.

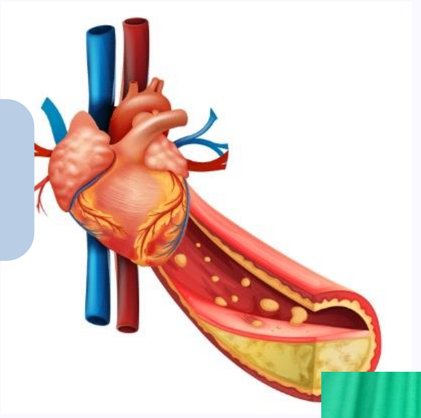
Who is a critical patient?

A **Airway**



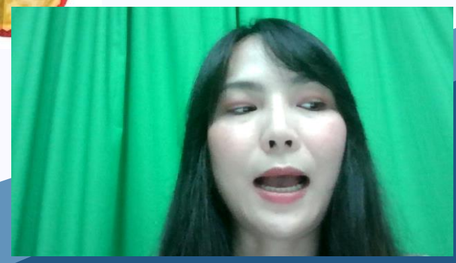
B **Breathing**

C **Circulation**



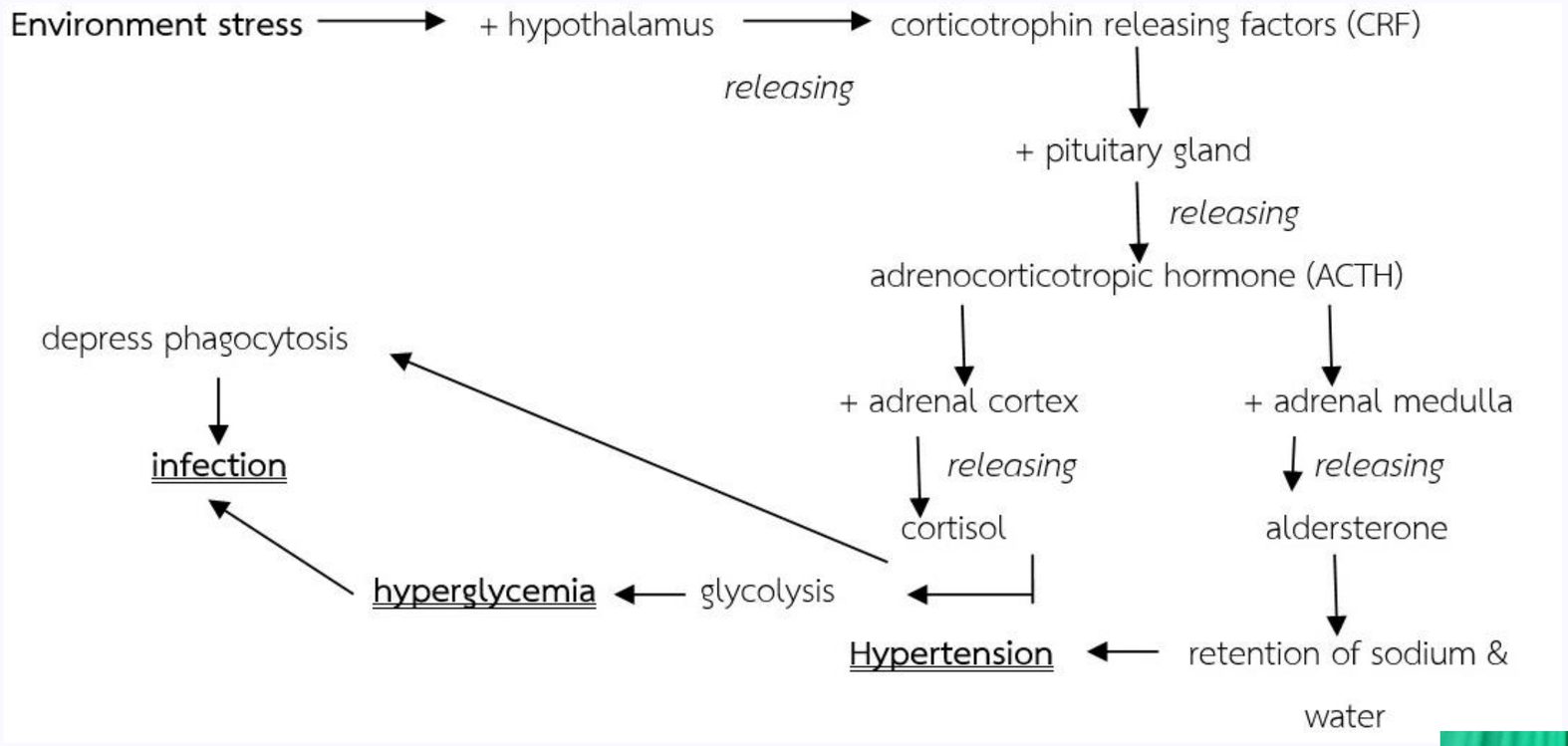
- **A Critically ill patient is someone suffering from a life-threatening condition**
- **significantly impairs their bodily functions**
- **they require intensive medical care to survive**

(Bruinink et al., 2024; Jackson et al., 2020)

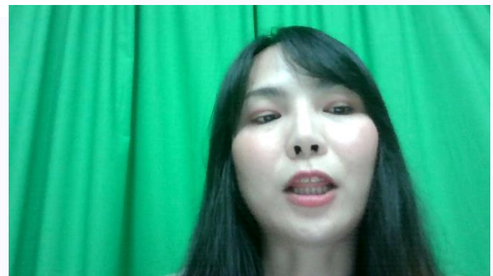


Impact on critically ill patients

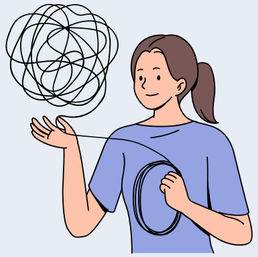
physiological stresses of critical



Karuppaiah et al., 2023; วรางคณา สายสิทธิ์, 2564



Impact on critically ill patients



physiological

- Functional dysfunction
- cognitive impairment
- Morbidity
- Mortality
- Comorbidity
- Malnutrition

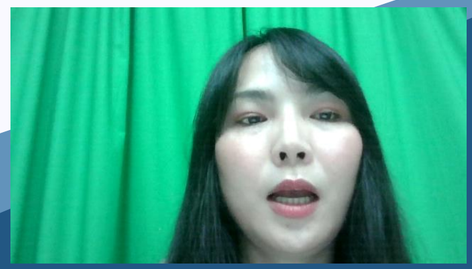
Psychological

- Stress
- Anxiety
- ICU delirium

psychosocial

- Family
- income

Bulic et al., 2020; วิจิตรา กุสุมภ์ และสุนันทา ครองยุทธ, 2563



ICU medical conditions

- Septic shock
- Cardiogenic shock
- Acute respiratory failure
- Stroke
- Severe asthma
- Acute respiratory distress syndrome (ARDS)
- Influenza with complication
- Acute liver failure
- Acute kidney injury
- Pneumonia

- Shock
- Sepsis
- Pulmonary embolism
- Intracranial hemorrhage
- Biliary tract infections
- Severe diabetic ulcers
- Cerebral edema
- Heart failure
- Multiple organ failure

https://www.medparkhospital.com/en-US/center-and-specialty/critical-care

Overview of some critical care organ support and monitoring options

Respiratory

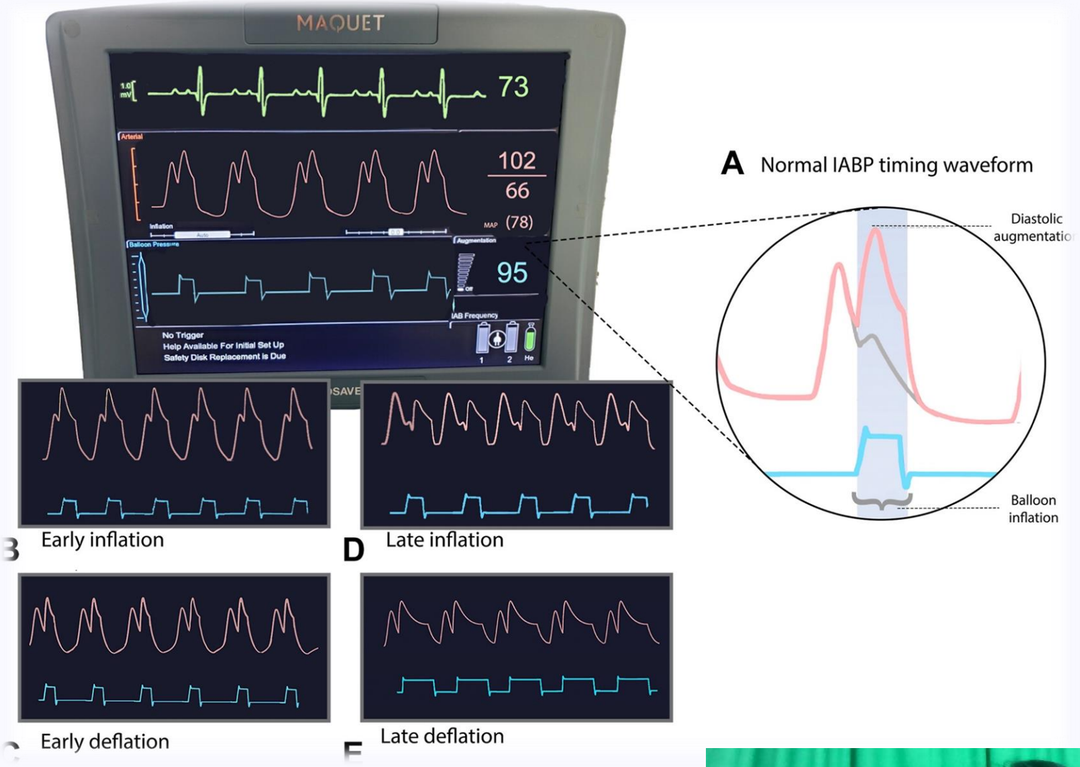
1. High flow oxygen/high flow nasal cannula therapy
CPAP (nasal, hood, mask)
2. Non-invasive ventilation
3. Invasive ventilation (various techniques including recruitment manoeuvres)
4. Percutaneous tracheostomy
5. Bronchoscopy, broncho-alveolar lavage
6. Prone ventilation

Jackson et al., 2020

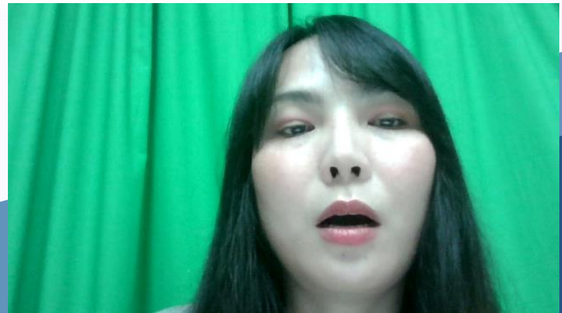
Overview of some critical care organ support and monitoring options

Cardiovascular

1. IV fluids management
2. Vasopressors and inotropes
3. Arterial and central venous catheters
4. Cardiac output monitoring: Pulse contour analysis (LiDCO, PiCCO and others), oesophageal doppler, pulmonary artery flotation catheter
5. Cardiac pacing
6. Echocardiography (trans-thoracic and trans-oesophageal)
7. Intra-aortic balloon counterpulsation pump
8. ECMO



Jackson et al., 2020



Overview of some critical care organ support and monitoring options

Renal

Renal replacement therapy including

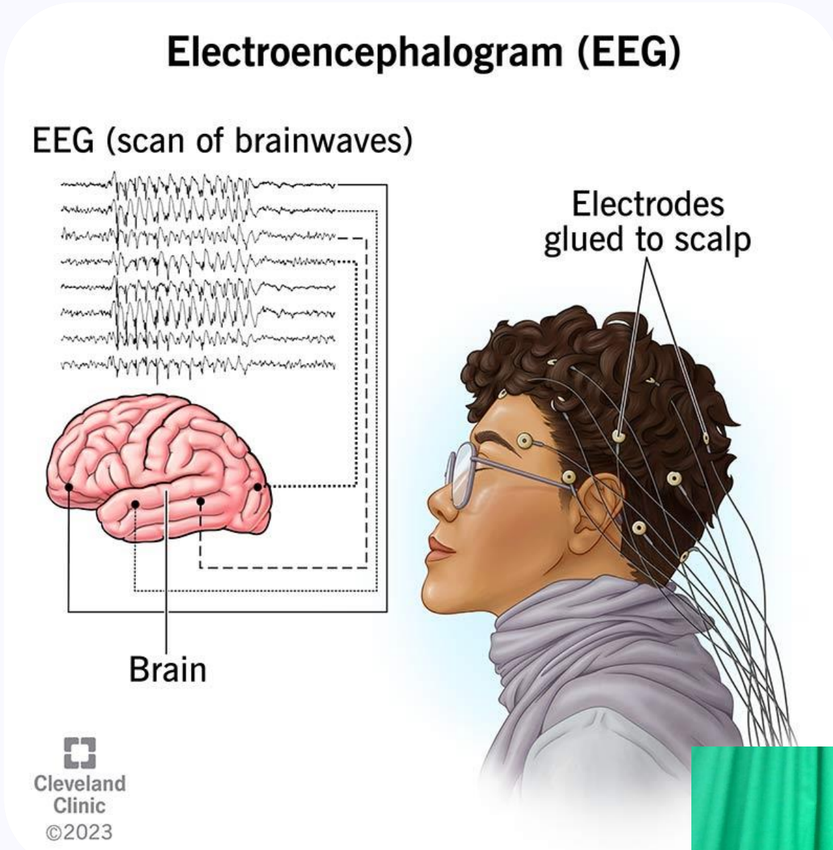
1. continuous veno-venous haemo (dia-) filtration (CRRT)
2. intermittent hemodialysis

Jackson et al., 2020

Overview of some critical care organ support and monitoring options

CNS

1. Neurological observations
Raw EEG (or EEG- derived)
2. monitoring
Intracranial pressure monitoring
3. Therapeutic cooling/temperature control



Jackson et al., 2020

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