

Introduction to Intensive Care: Study Days 1 - 4

Aims / Purpose: The aim of the study days is:

- To enable the Preceptee to effectively monitor and perform a nursing assessment of the sick and premature baby.
- To introduce the Preceptee to the concepts of Continuous Positive Airway Pressure (CPAP).
- To introduce the Preceptee to the concepts of patient triggered, high frequency and volume ventilation, including the use of Nitric oxide.
- To enable the Preceptee to begin developing advanced skills in the care of critically ill neonates.

Content:

Day 1:

- Complete Newborn Resuscitation core competency CPR 9 or 10
- Adapt Hazinski's seven-point check to the assessment of the critically ill neonate.
- Develop beginning skills in the use of the Philips intensive care monitor.
- Gain an insight into the Neonatal Intensive Care environment.
- Locate emergency equipment in the birthing suite
- Discuss and demonstrate the following elements of advanced resuscitation
 - establishing ventilation
 - emergency drugs

DAY 2:

- Discuss the nursing care of umbilical and peripheral arterial lines.
- Discuss normal blood pressure and maintenance in the neonate.
- Develop beginning skills in arterial blood gas analysis.
- Discuss the physiology of ventilation as it applies to CPAP.
- Discuss the nursing care of a baby on Flow Driver and Bubble CPAP.
- Assessment of the respiratory compromise neonate and the importance of airway humidification during mechanical ventilation.

Day 3:

- Apply the principles of patient triggered ventilation to synchronised intermittent ventilation (SIMV) and assist control (AC).
- Adjust parameters on the SLE ventilators
- Describe ventilation parameters (FiO_2 , flow, PIP, PEEP, IT, I:E ratio, MAP and rate) and adjust these to deliver CPAP and IPPV (Intermittent Positive Pressure Ventilation)
- Discuss the Nursing care of a ventilated baby
- Discuss the physiology and practical aspects of high frequency ventilation (HFV)
- Discuss the physiology and application of Nitric Oxide
- Discuss the physiology of volume ventilation
- Develop beginner skills with Transport Incubator

Day 4:

- Discuss neonatal surgical issues
- Discuss the effects of hypoxic ischaemic encephalopathy and cooling
- Discuss the implications of IVH
- Discuss pneumothorax and chest drains
- Skin care of the extreme premature neonate

Workshop	Date	Location
Introduction to Intensive Care	4 study days	Neonatal Service Education Room, 4 th floor, Christchurch Women's Hospital
Duration	8hrs each	0830 to 1630hrs
Contact person	Edna Byron, Nurse Educator, Neonatal Service Ext. 85878 (voice mail)	
Target Audience	Registered nurse, competent in special care nursing Registered nurse transferred from another NICU	
Pre-requisite	Competent in special care nursing CPR 9 or 10 completed	
Links to CDHB/MOH initiatives	Foundation information for work in Intensive care area of CWH.	