

## **Neonatology unit**

### About the unit

The Neonatal Intensive Care Unit (NICU) at MUCH is a state-of-the-art, Level III, 35-bed unit providing provides the highest level of care to medically complex and surgical neonates. It is a national leader in the field of neonatal care. We collaborate with a range of medical and surgical subspecialists to care for the sickest infants, including those with extreme prematurity, respiratory failure, extremely low birth weight/very low birth weight, congenital heart disease, and other complex congenital abnormalities that may require surgery. We aim to deliver excellence in neonatal intensive care through innovation, collaboration, compassion, education, and family support, to ensure every newborn achieves their potential for a brighter future.

The NICU is staffed by doctors and nurses who are specialists in newborn care, along with nurses in other specialties– all working together to provide care that lasts beyond the initial intervention and recovery period. We provide training for undergraduates, residents, house officers, Arab board, Egyptian fellowship and ministry of health trainees.

The NICU has a long history of clinical research, which has had a substantial impact in neonatology. The strength of our clinical research has evolved from studies on nCPAP and gentle mechanical ventilation in premature infants, management of hypoxic-ischemic encephalopathy, neonatal sepsis and antibiotic resistance in the NICU, lung and diaphragm ultrasound. This work and our practice have received worldwide recognition and acceptance in current neonatal respiratory care. This history of excellence continues in the innovative work we are doing to change how we communicate with and empower families, how we support the neurodevelopment and growth of infants, and, of course, how we continue to help babies breathe.

### Patient care

A) Advanced respiratory care:

- 1) Continuous positive airway pressure (CPAP)
- 2) High flow nasal cannula

- 3) Noninvasive mechanical ventilation (NIPPV)
  - 4) Invasive mechanical ventilation (both conventional and high frequency oscillation)
- B) Management of neonates with critical congenital heart disease
- C) Management of surgical problems in neonates
- D) Management of inborn errors of metabolism in neonates
- D) Therapeutic hypothermia
1. Selective head cooling
  2. Whole body cooling
- E) Amplitude integrated EEG
- D) Screening for retinopathy of prematurity
- E) Routine hearing screen
- F) Point of care ultrasound
- lung ultrasound
  - head ultrasound
  - abdominal ultrasound
  - functional echocardiography
- G) Neurodevelopmental follow-up of preterm babies and other high-risk neonates

Staff members:

Prof/ Shadia El-Sallab

Prof/ Mohamed Khashaba

Prof/ Mohamed Reda

Prof/ Hesham Abdel-Hady (Current chief of the NICU)

Prof/ Basma Shouman

Prof/ Nehad Nasef

Prof Abdel-Aziz Attalla

Associate Prof/ Islam Nor

Lecturer/ Ahmed Mahfouz

Lecturer/ Nada Mohsen

Assistant lecturer/ Menna Hashish

Assistant lecturer/ Basma Nor