

Owned and Published by the Medical Society of
Ahmed Maher Teaching Hospital

Editorial Article

The Egyptian Neonatal Intensive Care

Mohamed Fawzy Abdel Azeem Al-Soda, MD
Hospital Director

The neonatal period is defined as "less than 28 days of life". This period is a highly vulnerable time for an infant, who is completing many of the physiologic adjustments required for extrauterine existence.

Newborn babies who need intensive medical attention are often admitted into a special area of the hospital called the Neonatal Intensive Care Unit (NICU). The NICU combines advanced technology and trained healthcare professionals to provide specialized care for the newborns.

NICUs may also have intermediate or continuing care areas for babies who are not as sick but do need specialized nursing care. Some hospitals do not have the personnel or a NICU and babies must be transferred to another hospital. The Egyptian National Neonatal Care Program (ENNCP) provides services national wide. The number of neonatal units is steadily increasing and differences between the units are characterized by available spaces, quantity and types of equipment and supplies, the number and qualifications of available staff, case loads and quality of services.

Statistics of the Ministry of Health, confirms that the number of births in Egypt in 2010 reached two million and 382 thousand births, 10% of them (i.e., 238,200 births) need to nurseries immediately after birth. However, the total number of nurseries available in university hospitals and therapeutic medicine and the Hospital Authority and educational institutions, the secretariat of specialized medical centers, health insurance and therapeutic institution are

3689 only and compared the numbers of births, we find that there are 3 nurseries per 1,000 births, while the global standard appreciated by about 8 nurseries per 1000 births, stressing that the ministry is seeking in the coming period to increase the number of nurseries. Most babies admitted to the NICU are premature (born before 37 weeks of pregnancy), have low birthweight (less than 2.5 kg) or have a medical condition that requires special care. In the US, nearly 13 percent of babies are born preterm, and many of these babies also have low birthweights. Twins, triplets, and other multiples often are admitted to the NICU, as they tend to be born earlier and smaller than single birth babies. Babies with medical conditions such as heart problems, infections, or birth defects are also cared for in the NICU.

The following are some factors that can place a baby at high risk and increase his chances of being admitted to the NICU. However, each baby must be evaluated individually to determine the need for admission.

High-risk factors include the following:

□ Maternal factors:

- Age younger than 16 or older than 40 years.
- Drug or alcohol exposure.
- Diabetes.
- Hypertension (high blood pressure).
- Bleeding.
- Sexually transmitted diseases.
- Multiple pregnancy (twins, triplets, or more).
- Too little or too much amniotic fluid.

The Egyptian Neonatal Intensive Care

- Premature rupture of membranes (also called the amniotic sac or bag of waters)

□ Delivery factors:

- Fetal distress/birth asphyxia (changes in organ systems due to lack of oxygen)
- Breech delivery presentation (buttocks delivered first) or other abnormal presentation
- Meconium (the baby's first stool passed during pregnancy into the amniotic fluid)
- Nuchal cord (cord around the baby's neck)
- Forceps or cesarean delivery

□ Baby factors:

- Birth at gestational age less than 37 weeks or more than 42 weeks
- Birthweight less than 2,500 grams or over 4,000 grams
- Small for gestational age
- Medication or resuscitation in the delivery room
- Birth defects

- Respiratory distress including rapid breathing, grunting, or apnea (stopping breathing)
- Infection such as herpes, group B streptococcus, chlamydia
- Seizures
- Hypoglycemia (low blood sugar)
- Need for extra oxygen or monitoring, intravenous (IV) therapy, or medications
- Need for special treatment or procedures such as a blood transfusion the cause of the increasing problem of premature babies medically due to the large number of artificial insemination for infertility cases and the accompanying progress in this area and the use of drugs that help to increase the fertility rate, or bleeding or to be a smoked mother, or when a difficulty in breathing or convulsions of the child after birth or other of the many reasons. The second reason is the failure to provide free incubator for this child while providing superior medical care. One of the major causes worsening shortage of nurseries is a nursing shortage.