

INTRODUCTION

Premature infant is the live born newborn who is born before the end of 37 weeks of gestation, regardless of birth weight. It represents the highest percentage of high- risk group and account for the largest number of admission to the Neonatal Intensive Care Units (NICUs) (*Gallagher, 2007, and Gaynor, 2010*). Approximately 5% to 7% of all infants are born prematurely worldwide. In Egypt premature births accounts for the highest mortality rate among infant in the first year of life (*MOHP, 2001*). Because of the immaturity of premature body systems and lack of adequate nutritional reserves; premature infants are at risk for a number of short and long-term problems (*(Klossner and Hatfield, 2006; and Wong et al., 2007)*).

The premature infants are at risk for serious problems and greater risk of medical complications, long term disabilities, and death. The earlier an newborn is born, the less his weight, the less developed his/her organs will be, and the more complication likely to face (*Klaus and Fanorff, 2005 and Carson and Penick, 2010*).

All premature infants need priority of care in the first days of life that must be met as, initiation and maintenance of respiration, establishing of extrauterine circulation, control of body temperature, intake of adequate nourishment, establishment of waste elimination, prevention of infection, and establishment of infant–parent relationship. However fulfilling these needs may require special care in the NICUs, which have specialized medical staff and equipment that can deal with the multiple problems faced by premature infant (*American College of Obstetricians and Gynecologists, 2005; and Pillitteri, 2009*).

The birth of a premature infant is an unexpected and stressful event for mothers. They are faced with the problem of learning about the special care needed for premature infants and how they differ from the needs of premature infants and how they differ from the needs of full term infants. Ideally parents are involved in the physical care of their infants before discharge and developmentally supportive care practiced in the NICUs helps them to adapt to the behavior of premature infants. On the other hand, comprehensive long-term follow-up care is especially important for every premature infant because of the incidence of significant handicaps and appropriate treatment when indicated will improve the outcome (*Littelton and Engebreston, 2005; and Wong et al., 2007*).

Simple written materials for mothers about their premature infants' care should be provided to refresh the memory of mothers who may be tired and uncomfortable when teaching occurs. Additionally, the care of premature infants and their mothers does not stop on discharge from the NICUs. However, follow-up is extremely important for premature infants after hospital discharge for continued medical supervision, well infant examination, feeding, immunization, and early detection of any developmental delay; many developmental problems are not noted until the infant is older and begins to demonstrate motor or sensory disability (*Sells et al., 2007*).

Discharge of the premature infant considered one of nursing tasks. In most situations, the infant will need primary care and health maintenance, and the parent should know where this would be provided when management of problems is necessary. It is the responsibility of the nurse to arrange plan of care for the infant and parents. Parents are often anxious when their premature infants are discharged, they should receive

discharge instructions which includes; breast feeding skills, formula feeding techniques, formula preparation, bathing, diapering, normal elimination pattern, safety measures, signs of illness, administration of medications, the infant health condition and the importance of follow up care after discharge (*MOHP, 2001; and Olds et al., 2004*).

A well planned discharge of medically stable infant is important to assure safe and effective care at home and to minimize avoidable hospital readmissions. The nurse provides additional support and teaching about the infants' care, if necessary, and answers any questions the family might have (*Ritchie, 2002; and Hummel and Cronin, 2004*).

At the time for discharge of the infants' nears, the family is understandably apprehensive. The NICUs' nurses must teach the mother the skills they need to care for the infant. The knowledge gives parent's confidence that they can take care of the infant. Some hospitals allow caregivers to stay overnight before the infant discharge, so that they can participate in around-the clock care, in which discharge requires assessment, coordination, and possible intervention by a multidisciplinary team. The infants' health condition and the family's social situation must be considered before discharge to design a discharge plan for the infants' and long term well-being (*Robison et al., 2010*).
