ABSTRACT

Quality of care provided at birth is important for survival of newborn. Newborn mortality is a leading cause of child deaths in Sri Lanka. Essential newborn care (ENC) is a set of evidence based interventions adopted by the local health system as the other countries, to reduce newborn morbidity and mortality in order to reduce child deaths in achieving the Millennium Development goal 4.

This descriptive cross sectional study was carried out to describe knowledge and practices on ENC and the facilities available to provide ENC at two specialized maternity institutions in District of Colombo. Facilities were observed in the 10 labour rooms and the 10 postnatal wards (PNW) of the institutions and knowledge was assessed in a sample selected by stratified systematic sampling method, in 228 Health Care Providers (HCP) including medical officers (MO), nursing officers (NO) and midwives (MW). Practices were observed in a sample of 30 deliveries by visiting the 10 labour rooms in a roster until 3 deliveries from each labour room were observed. Checklists were used to assess facilities and practices and a self- administered questionnaire was used to assess knowledge in HCP. Percentages of adequate facilities and appropriate practices (according to national recommendations) were obtained and knowledge scores were derived as percentage of total score. Odds ratio and Chi square tests were applied where appropriate.

Among the facilities that were assessed elbow taps were available only in 30% of the labour rooms and 30% of the PNW. None of the labour rooms had adequate number of ambu bags and none of the PNW had a separate neonatal emergency tray or the essential items that should be available in it. Thermal regulation was possible only in 20% of labour rooms with air condition facilities.

In the assessment of knowledge 78% of HCP had good knowledge (score ≥60%). Ninety three percent (93%) of all MO had good knowledge, which had a significant relationship when compared with NO (X^2 7.56, $p < 0.05$) and MW (X^2 8.89, $p < 0.05$). In-service training on ENC course had a significant relationship ($p < 0.05$) with good knowledge in all three categories of HCP(in MO, NO and MW, X^2 is 37.0, 52.2 and 11.8 respectively).

When observing the practices at delivery it was seen that hand washing before delivery was 76.7% and after removing gloves was 73.3%. Cleaning thumb and finger tips were only 3.3% each. Out of the 13.3% deliveries that required resuscitation, vigorous

stimulation was done in all. Air conditioning or fans were switched off only in 60% deliveries and baby was kept with mother after initial procedure only in 13.3% deliveries.

Most facilities for the provision of Essential Newborn Care are available as per standard national recommendation in the two maternity hospitals. However the some essential items like neonatal ambu bags, neonatal emergency trays, elbow taps and thermal regulation facilities in labour rooms were lacking or in inadequate amounts. Medical Officers had better knowledge on ENC than the other categories of staff. HCP who had undergone ENC also displayed better knowledge. Hand washing, prevention of hypothermia in the newborn and newborn resuscitation practices especially were observed to be poor.

Immediate action should be taken to fulfil the basic essential requirements to provide newborn care. Knowledge of all the HCP working in the maternity units should be improved by conducting regular in-service training programmes on ENC giving special emphasis on newborn resuscitation, identification and management of newborn illness and care of preterm and low birth weight baby. Practices of ENC in the labour rooms should be regularly monitored and supervised using standard checklists and hands on skills training should be provided when ever required.

Key words:- Essential Newborn Care, Neonatal Care Practices, Knowledge on Newborn Care