

ABSTRACT

BACKGROUND:

In recent trends, there is increasing number of babies born with very low birth weight. These VLBW babies are at risk of developing Hypoglycemia, Sepsis, Hyperbilirubinemia, Respiratory distress when compared to term babies. By studying the risk factors leading to very low birth weight and their morbidities, health professionals will be able to anticipate and manage them accordingly. Identification of morbidity and mortality in VLBW neonates will help us in formulating and implementing interventions to reduce neonatal mortality rate.

AIM:

To study the morbidity and mortality profile in very low birth weight neonates in Neonatal Intensive Care Unit in Coimbatore medical college Hospital.

OBJECTIVES:

- 1) To study the morbidity and mortality pattern in very low birth weight neonates.
- 2) To study the maternal risk factors leading to very low birth weight neonates.

- 3) To establish targeted preventive and advanced treatment strategies in specific areas.
- 4) To plan for future research in areas of increased admission and mortality.

STUDY DESIGN:

Prospective cohort study

STUDY PLACE:

Neonatal Intensive Care Unit, Coimbatore Medical College Hospital

STUDY PERIOD:

January 2017 – December 2017

METHODS:

All very low birth weight babies admitted in NICU, Coimbatore medical college from January 2017- December 2017 were included. Maternal and baby details were recorded and their morbidity and mortality pattern were assessed.

RESULTS:

A total of 382 VLBW neonates were included. Out of 382 neonates, 199(52%) were males and 183(48%) were females, 231(60%) inborn and 151(40%) out born, 195(51%) were born out of normal vaginal delivery and 187(49%) by caesarean section. Their Mean birth weight was 1.25 kg in males and 1.27 kg in females. Among 382 VLBW neonates, 222(58%) were SGA, 92(24%) -AGA, 68(18%) were IUGR. Majority of VLBW neonates were in the gestational age group between 28-32 weeks (n = 224, 59%) and 32-34 weeks (n = 92, 24%).

The most common maternal risk factor associated with VLBW being Gestational hypertension -210(55%) followed by Anemia – 63(17%), Gestational diabetes mellitus- 8(2%), Hypothyroidism- 4(1%). The major morbidity was sepsis (n=133, 35%) followed by RDS (n= 105, 27%), TTN (n= 85, 22%). The most common mortality was Sepsis (n=49, 52%), RDS (n= 38, 40%).

CONCLUSION

Uplifting the socioeconomic status of women, Nutritional counselling to reduce anemia should be considered to reduce the incidence of very low birth weight babies. Antenatal steroid therapy needs to be more vigorously implemented.

Sepsis and Respiratory distress syndrome were the major cause of death.

Prematurity is the primary cause behind these neonatal death. This emphasizes the need to prevent preterm deliveries. Effective preventive strategies to decrease the preterm birth can only be the next big step to decrease the perinatal morbidity rate of our state.

Keywords : VLBW, Morbidity, Mortality