Background and aims
Various scoring system are used to predict morbidity and mortality. Among these the “Score for Neonatal Acute Physiology-Perinatal Extension-II” (SNAPPE-II) predicts the risk of mortality based on data collected within the first day of the newborn. We aimed to determine the efficacy of SNAPPE-II in predicting morbidity in extremely low birth weight infants (ELBW). We also assessed its efficacy in predicting the potential causes of neonatal morbidity.

Methods
Data from infants admitted between June 2012 and June 2013 to the neonatal intensive care unit with a birth weight less than 1500 g were collected in a retrospective manner. SNAPPE-II score was calculated for the first 24 h of each infant. The efficacy of SNAPPE-II score in predicting intra ventricular haemorrhage (IVH), necrotizing enterocolitis (NEC) and bronchopulmonary dysplasia (BPD) as well as mortality was evaluated.

Results
A total of 182 infants (98 males and 84 females) were enrolled in the study. Mean birth weight was 1,134 ± 264 g. The most notable scores documented for SNAPPE-II were 3.3 for mortality (sensitivity 86.6%, specificity 76.4%), 2.3 for IVH (sensitivity 88.2%, specificity 64.6%), 39 for NEC (sensitivity 78.7%, specificity 72.6%) and 36 for BPD (sensitivity 87.8%, specificity 69.4%). Infants with a high SNAPPE-II score had significantly higher rates of IVH (p < 0.001), NEC (p = 0.014) and BPD (p = 0.003).

Conclusions
We found that a high score of SNAPPE-II in premature infants was independently associated with neonatal mortality as well as with factors know to be associated with neonatal morbidity, such as IVH, NEC and BPD.