

## Original Paper

# The evaluation of predicting mortality risk of premature infants with very low birthweight by CRIB score

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### Abstract

**Background and Objective:** To evaluate the effectiveness of Neonatal Intensive Cares Many different data banks have been developed. Furthermore, various scoring systems such as SNAP and CRIB have been validated to designate and compared differences among hospitalized patients in NICU. This study was done to determine mortality rate and prevalence of complications in neonates admitted to Taleghani and Dezyani NICU centers in Gorgan - Iran.

**Materials and Methods:** In this descriptive study a questionnaire including sex, birthweight, gestational age, duration of hospitalization, age at the time of discharge or death, complications and other information needed for CRIB scoring system, was completed for 46 neonates with gestational age of less than 37-week old and birth weight of less than 1500 grams.

**Results:** Mortality rate was 37% (17 neonates) with the most common cause being respiratory failure. RDS was associated with a 101-fold increase for the chance of death (OR=1.1, CI=12.9-793.6). This probability was 4.7 fold for delivery-time asphyxia. The mean of birthweight, gestational age and CRIB in living and dead infants were 1201 and 934 grams, 30 and 28 weeks and 3.76 and 11.7, respectively. Using a ROC curve, a cut off point of 7 was reached to predict neonatal outcome for CRIB scoring.

**Conclusion:** This study showed that the mortality rate was higher than the rate in most centers of the world. The mortality rate was directly related with the increase of CRIB score, especially for scores more than 11.

**Keywords:** Prematurity, Low BirthWeight, Mortality Rate, CRIB

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