

EVALUATION OF THE APACHE II AND SOFA SCORES FOR PROGNOSTICATION OF PEDIATRICS OUTCOMES A-10-68-1

Mohammad Hosseini* , Jamileh Ramazani

Introduction: APACHE II and SOFA are of the most validated and prevalent general scoring systems over the world. The aim of the current study was to evaluate APACHE II and SOFA ability in predicting the pediatrics outcomes (survivors, non-survivors) in surgical and medical ICU.

Material and Methods: This was an observational and prospective study of 48 consecutive patients admitted in surgical and medical ICU during 6-month period. APACHE II and SOFA scores and demographic characteristics were recorded for each patient separately in the first admission 24h. Statistical Analysis Used: Receiver operator characteristic (ROC) curves, Hosmer-Lemeshow test and Logistic regression were used in statistical analysis (95% confidence interval)

Results: Data analysis showed a significant statistical difference in APACHE II and SOFA scores between survivor and Non-survivor patients ($p<0/001$, $p=0/03$; respectively). The discrimination power was poor for APACHE II and good for SOFA (area under ROC (AUC) curve: 60/5% (SE: 3.1%), 89/5% (SE: 3.5%); respectively).The acceptable Calibration was seen just for SOFA ($\chi^2=10/136$, $p=0/053$)

Conclusions: Both APACHE II and SOFA showed good predictive accuracy for pediatrics outcomes in surgical and medical ICUs; however, the SOFA is the choice to select, because of being simpler and easier to record data.

Key Words: APACHE II, SOFA, survivor, Non-survivor, pediatrics, ICU

