Abstract

Introduction: P.I.C.U is a unit that provides care to the critically ill patients with the purpose of reducing the rate of mortality and morbidity. Various scoring systems are used to assess and compare the standards of care of different P.I.C.U.s. Among them, PRISM III scoring has shown promising results, especially in developing countries. In Pakistan, these studies are fewer in numbers with conflicting results in different hospital settings (private and public sector). Since our hospital is also a tertiary care hospital, we planned a pilot study to evaluate PRISM III score in our P.I.C.U.

Objective: To evaluate the performance of PRISM III score in predicting the outcome of patients admitted in P.I.C.U of tertiary care hospital of Karachi.

Method: PRISM III is a Pediatric Risk of Mortality Scoring system consisting of clinical assessment (Glasgow Coma Scale, pupillary reflex, temperature, heart rate, systolic blood pressure) and lab parameters (arterial blood gas, urea, nitrogen, creatinine, blood sugar, potassium, white cell count, platelets, PT/PTT). It is a cross-sectional study and data was collected from admitted patients in P.I.C.U, Unit II of Abbasi Shaheed Hospital during 1st October to 31st December 2016. PRISM score is being calculated from all the patients within 24 hours of admission.

Result: Total of 70 patients of which 51(72%) survived and 19(27%) expired. 49 were males and 21 females. Age range of non-survivors was 2 to 18 months. Duration of P.I.C.U stay was 72 hours for survivors. Patients who were referred, had malnutrition, depressed mental status, deranged renal functions and required mechanical ventilation during first hour of admission had poor outcome. Out of 19 non-survivors, PRISM III predicted mortality in 15 patients (78.9%).

Conclusion: High total PRISM III score was significantly associated with poor outcome i.e. death in this pilot study. Thus PRISM III score was found to be a valid predictor of outcome in our P.I.C.U. There is no conflict of interest keywords: P.I.C.U, Mortality, PRISM III score, Outcome.