

SAPS II and APACHE II and Prediction of the Mortality and Later Development of Complications in Poisoned Patients Admitted to Intensive Care Unit

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Abstract

Background: The aim of this study was to determine the *acute physiology and chronic health evaluation* (APACHE) II and *simplified acute physiology score* (SAPS) II in poisoned patients admitted to the poisoning ICU and comparing them to see which one was a more sensitive and specific system for prognostication of the mortality and complications in these patients.

Materials and Methods: Between February 2013 and July 2013, all patients referred to our center with any poisoning mandating ICU admission were prospectively included. On ICU arrival, a questionnaire containing the demographic data, parameters of the APACHE II and SAPS II scores, the sum of the scores, complications during the stay and the patients' final outcome (complete recovery versus death) was furnished for every patient. The data was then analysed using SPSS version 17.

Results: A total of 195 patients were evaluated. Forty-two patients (21.5%) died and 153 survived. Mean SAPS and APACHE scores were 41 ± 16 and 15 ± 6 , respectively. Mean SAPS and APACHE scores were significantly different between the survivors and non-survivors (both P values < 0.001). Both scores could successfully prognosticate the development of the complications (P = 0.07 and 0.013, respectively). APACHE II was a better score in prediction of both mortality and later complications in the setting of poisoning ICU.

Conclusion: APACHE > 22 has a good specificity in determining the mortality and development of further complications in poisoned patients admitted to the medical toxicology ICUs. SAPS II score > 59 and > 43 can predict the risk of mortality and later complications in these patients, as well.