

Correlation of Acute Physiology and Chronic Health Evaluation (APACHE) II and Sequential Organ Failure Assessment (SOFA) Scores with Risk of Mortality And Length Of Stay (LOS) In Intensive Care Units Among Palestinian Hospitals at Nablus City.

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Abstract

Background

Scoring systems can be used to estimate patient's prognosis & help in clinical decision making in the ICU. The most frequent used scoring systems are, APACHE-II score and SOFA score. These scoring systems provide gross estimate of mortality risks in critical patients. The APACHE II and SOFA scores could be reliable in assessing mortality risk and ICU LOS.

Aim

The aim of this study was to evaluate the usefulness of using APACHE II score and SOFA score as the predictors of length of stay (LOS) and risk of mortality in intensive care units (ICUs) among Palestinian hospitals at Nablus city.

Methods

A prospective study design was conducted in the ICU's of Palestinian hospitals at Nablus city. The sample consisted from 50 patients of adult critically ill patients who were: aged 16 years or above & remained in the ICU for more than 24 hours. Both scores (APACHE II score and SOFA score) were assessed at the first 24 hours of ICU admission, by taking in consideration assessment based on the worst values.

Results

There was statistically significant differences between APACHE II score and mortality risk ($P = 0.00$), there was statistical significance between APACHE II score and ICU LOS ($P = 0.04$), SOFA score is statistically significant with mortality risk ($P = 0.00$), where as SOFA score was not significant with ICU LOS ($P = 0.06$).

Conclusion

Both of APACHE II score and SOFA score are effective in assessing mortality risk, while only APACHE II score is effective to predict ICU LOS.

Keywords

APACHE II score, SOFA score, ICU, LOS, Mortality risk