

## Background:

New sepsis definition launched in 2016. Sepsis is defined as life-threatening organ dysfunction caused by a dysregulated host response to infection. Organ dysfunction can be identified as an acute change in total Sepsis-related Organ Failure Assessment(SOFA) score  $\geq 2$  points consequent to the infection. Quick Sepsis-related Organ Failure Assessment (qSOFA) is a new screening tool for clinical assessment sepsis in Emergency department.

## Objectives:

The primary objective is to study mortality rates within 28 days and Intensive care unit(ICU) admission rates in sepsis patients at emergency department(ED) during year 2014-2017. The secondary objective is to study performance of qSOFA score compare with SOFA, Acute Physiology and Chronic Health Evaluation (APACHE) II, Mortality in Emergency Department Sepsis (MEDS).

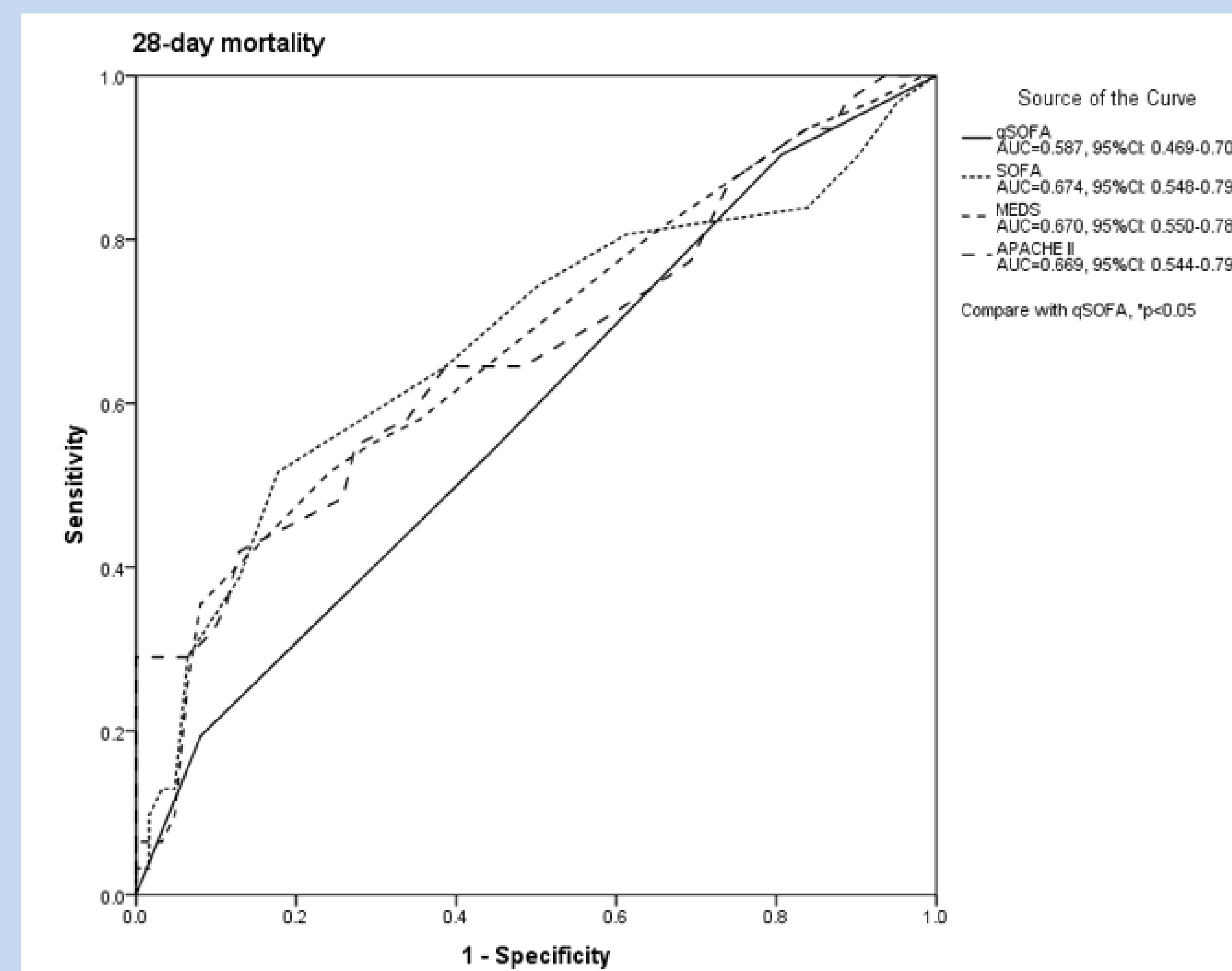
## Patients & Methods:

A retrospective observational study by analyzed electronic medical record of 93 patients, who have clinical diagnosed sepsis with complete data were recorded in ED. Comparison of qSOFA score, SOFA, APACHE II and MEDS for prediction mortality and ICU admission rate in sepsis patients were done.

## Results & discussion :

28-day mortality and ICU admission rate in sepsis patients were 33.3% and 22.6%. The areas under the receiver operating characteristic curve of qSOFA score, SOFA, APACHE II and MEDS for prediction 28-day mortality rate were 0.587, 0.674, 0.670, 0.669. The areas under the receiver operating characteristic curve of qSOFA score, SOFA, APACHE II and MEDS for prediction ICU admission were 0.570, 0.620, 0.689, 0.520. There were no significant differences among 28-day mortality and ICU admission among qSOFA score, SOFA, APACHE II and MEDS.

Figure 1: The ROC curves of SOFA, qSOFA, APACHE II, and MEDS scores for predicting 28-day mortality and ICU admission. Twenty-eight-day mortality



## Conclusion & perspectives :

Prediction ability of qSOFA in 28-day mortality and ICU admission rate was similar performance to SOFA, APACHE II and MEDS.

Figure 2: Intensive care unit admission

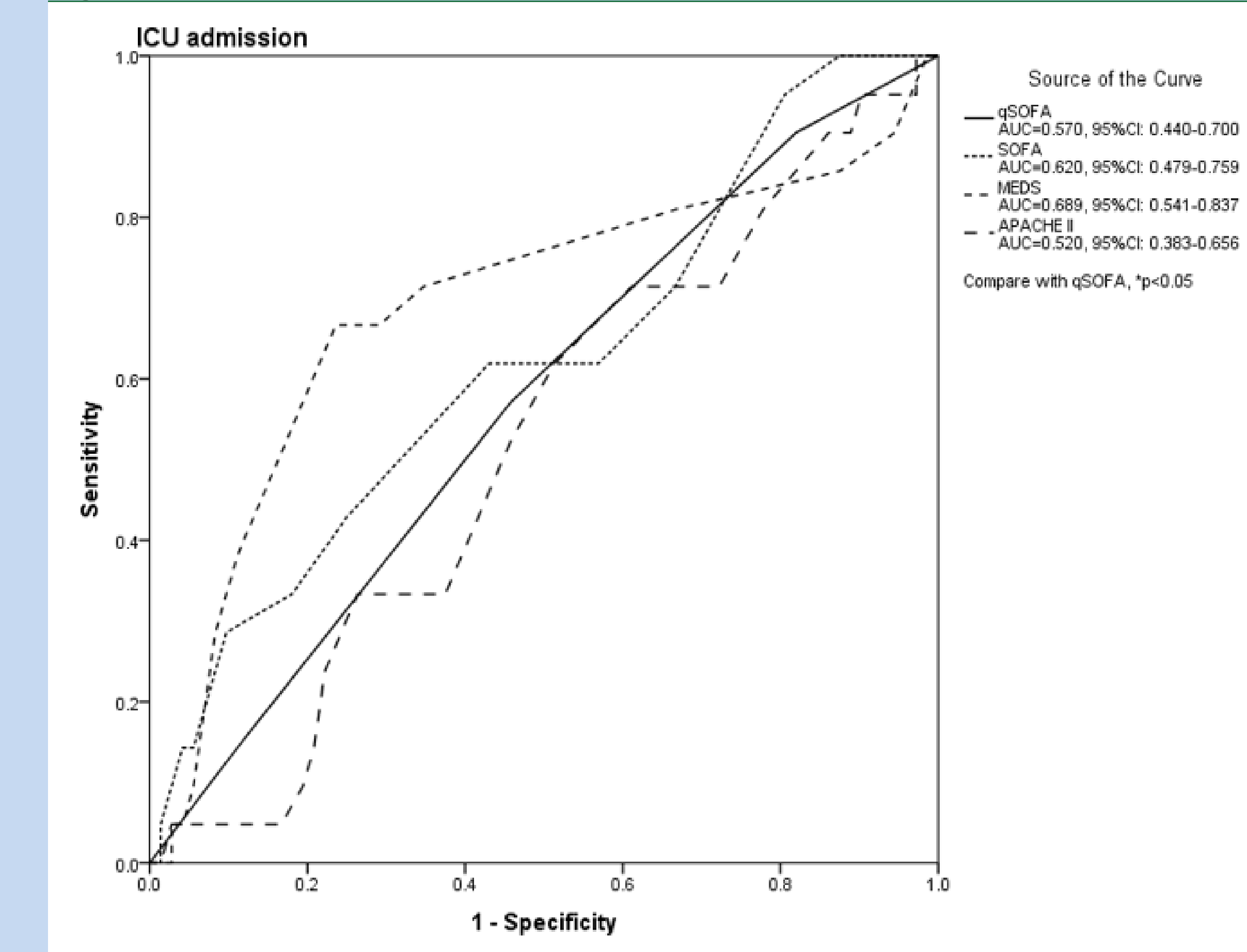
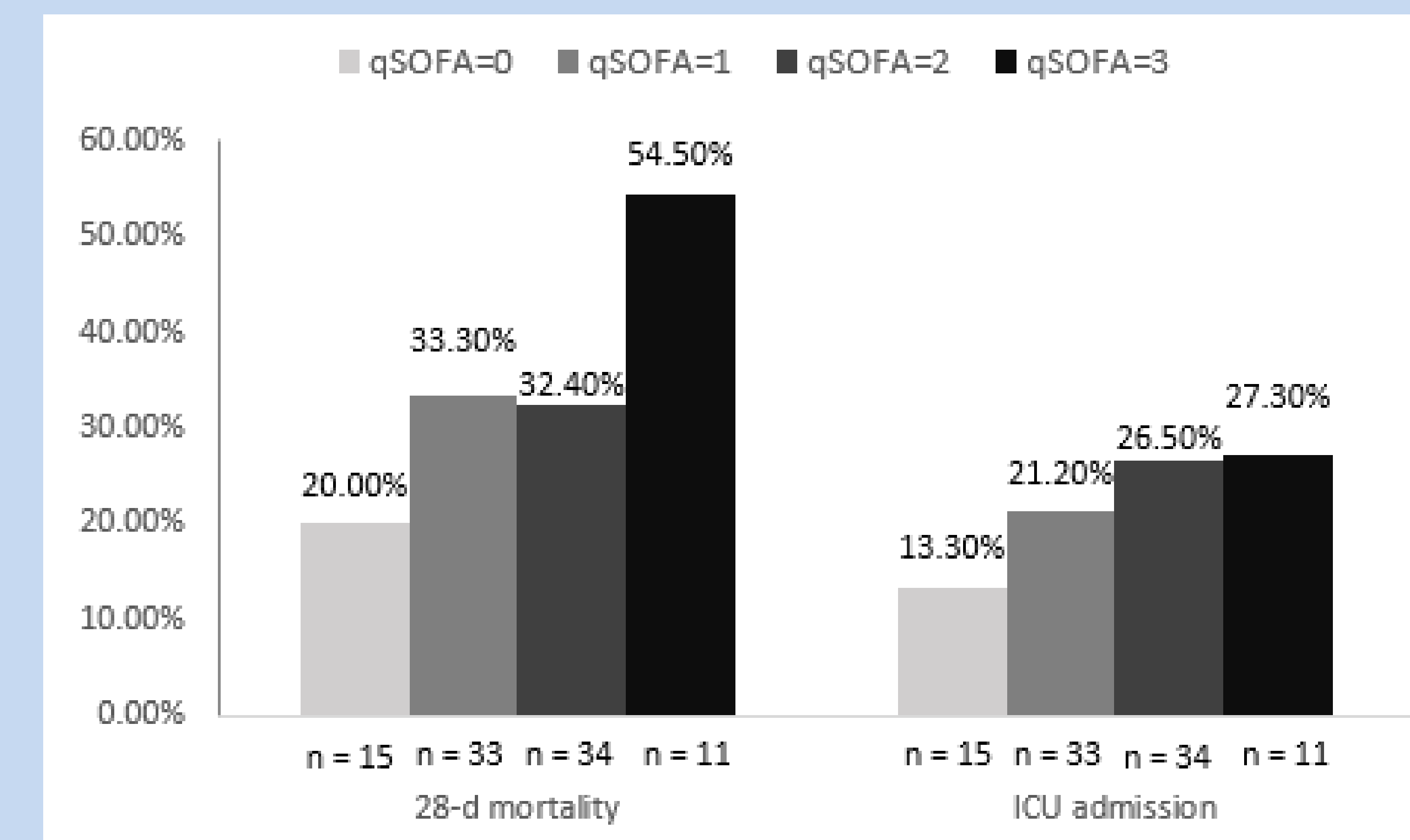


Figure 3: The 28-daymortality and ICU admission rate according to the qSOFA score. Prevalence of outcomes according to qSOFA score



## Acknowledgement :

Department of trauma and emergency medicine, Phramongkutklao Hospital