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Introduction:
Sepsis and septic shock patients are the most common cause of death in intensive care units.[1] The aim of this study is to quantify the relationship between 72 hours sequential organ failure assessment (SOFA) scores change and in-hospital mortality as a treatment outcome in sepsis and septic shock patients.

Methods:
A retrospective cohort study in tertiary hospital, Thailand was conducted. Sepsis or septic shock patients receiving carbapenems in medical intensive care unit during April to September 2017 were recruited. Delta SOFA scores, calculated by SOFA day 4 – SOFA day 1 after receiving the first dose of carbapenem, and in-hospital mortality were collected.

Results:
There were 86 adult patients (54.70% men, mean age 66 + 17 years, and 70.90% septic shock) during the study period. In-hospital mortality rate was 43%. Mean delta SOFA scores were -0.060 + 3.572 points. Comparing between two groups, the mean delta SOFA scores were significant lower in survivor group than in non-survivor group (-1.140 + 3.116 vs. 1.380 + 3.669; P < 0.001).

Conclusion:
The delta SOFA scores during the first few days were a useful predictor of in-hospital mortality in critically ill patients with sepsis and septic shock. An increase in delta SOFA score in the first 72 hours of treatment should be reassess for evaluate an adequacy of antibiotic therapy.

References: