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Letter to the Editor

National estimates of severe sepsis (our experience in Novi Sad, Serbia)

Dear Editor,

According to the US Centers for disease control and prevention, severe sepsis is the 13th leading cause of death in the USA, and the 1st cause of death in the ICU. There has been an increase in the rate of severe sepsis deaths in recent decades, which is attributed to an increase in invasive procedures, increase of immunocompromised and elderly patients.^{1,2}

This was a prospective, randomized study of 1638 patients, with polytrauma, admitted to the emergency center, Clinical Center Vojvodina, Novi Sad, Republic of Serbia, during a seven-year period. Out of 1638 patients there were 36 (2.2%) septic patients diagnosed upon positive hemoculture and inclusion criteria for severe sepsis. For the purpose of the study all septic adult patients (age >18 years), admitted to surgical ICU, between 2004 and 2012, were recruited from the database. A total of 2.2% were septic patients, with male predominance of 89%. Nguyen et al.³ have shown that the age-adjusted incidence and mortality of septic shock are consistently greater in men than in women.

Patients from 50 to 60 years had the highest incidence and mortality rates. There was a strong correlation between advanced age with the rates of incidence and mortality due to septic shock, with a sharp increase in the number of cases in patients older than 50 years.³

Several severity score systems have been used in the study, including the Sequential Organ Failure Assessment (SOFA). All our patients with severe sepsis had SOFA score greater than four points. Our diagram, the SOFA score, evaluates four organ systems (Fig. 1).

In a prospective study as well, a high total SOFA score and the highest score for each organ have been found to be related to mortality.

The estimated mortality due to severe sepsis has been reported between 20 and 56%.^{1,2} The hospital mortality rate in our study was close to 42%, which falls within these boundaries. Shapiro et al. reported similar results.⁴ The study by Wang et al. which likely more accurately reflects the incidence of severe sepsis and septic shock, reported a mortality rate of about 30%.⁵

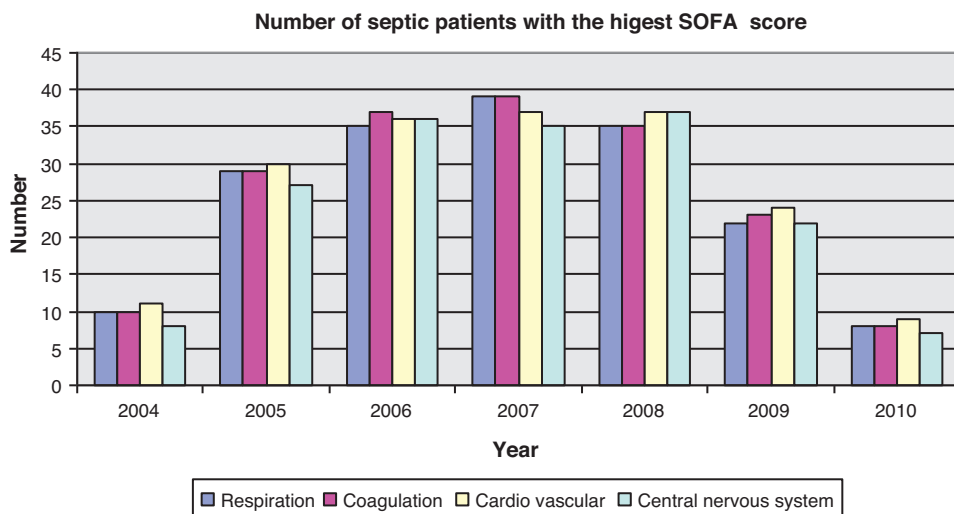


Fig. 1 – SOFA scores in patients with severe sepsis. SOFA, Sequential Organ Failure Assessment.

Conflict of interest

All authors declare to have no conflict of interest.

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Ljiljana Gvozdenović*, Violeta Knežević, Aleksandar Knežević, Nemanja Gvozdenović, Zoran Gojković
Clinical Center Vojvodina, Novi Sad, Serbia

*Corresponding author. Clinical Center of Vojvodina, Hajduk Veljkova 1, Novi Sad, Serbia.
E-mail address: profvozdenovic2010@hotmail.com
(L. Gvozdenović).

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