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## Influence of Gender on Age-Associated Mortality in Sepsis



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Despite advancements in medical care, sepsis remains a significant global health issue and a leading cause of hospital mortality worldwide. Numerous epidemiological studies have been conducted on sepsis, but its epidemiology remains unclear due to its heterogeneous nature.

Sepsis is characterised by an imbalanced immune response to infection. Most studies on mortality risk factors in sepsis primarily focus on predisposition to infection and organ dysfunction. In addition to well-established risk factors like age, immunosuppressive disease, and diabetes, gender may also impact sepsis outcomes. Several clinical and epidemiological studies in recent years have explored the association between gender and sepsis, with some suggesting a lower incidence in females. However, the evidence regarding gender-dependent clinical outcomes in sepsis remains inconsistent across various observational studies, and there is a lack of clear data on how gender influences outcomes once sepsis develops.

A recent study examined the impact of gender on in-hospital mortality in sepsis, with a specific focus on different age groups. Previous epidemiological studies on this topic have yielded contradictory findings, warranting further investigation.

This study used data from the Korean Sepsis Alliance, a large-scale multicentre cohort in South Korea. The cohort consisted of adult patients diagnosed with sepsis in the emergency departments of participating hospitals. Study researchers compare clinical characteristics and outcomes between male and female patients. The study categorised patients into three age groups: 19-50 years, 50-80 years, and  $\geq 80$  years, allowing for age-specific analysis.

A total of 6,442 patients were included in the analysis. 56.7% of the patients were male. Findings showed that in the 19-50 age group, males had a significantly lower risk of in-hospital mortality than females. The risk of death remained relatively stable for females until around age 80, while in males, there was a linear increase in the risk of in-hospital death until around age 80. Respiratory infections were more common in males, while urinary tract infections were more common in females. In the 19-50 group, males with respiratory infections had significantly lower in-hospital mortality than females.

This study suggests that gender may have an impact on age-associated sepsis outcomes. However, further research is necessary to validate these findings and understand how gender and age interact to influence the outcomes of patients with sepsis.

Source: [Critical Care](#)

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