

# Acute Kidney Injury in Elderly Patients: Narrative Review on Incidence, Risk Factors, and Mortality

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## Abstract

Acute kidney injury (AKI) is characterized by a sudden renal dysfunction with consequent increase of nitrogenous products, hydroelectrolytic and acid–base disorders. Its prevalence is high in hospitalized populations (4.9%–7.2%), especially in intensive care units (ICUs). Despite all the technical and therapeutic advances that have occurred in the last few decades, the overall mortality of AKI patients remains high, reaching 80% in ICU patients. Several conditions predispose a patient to progress with AKI, including age, sepsis, surgeries, and comorbidities, such as systemic arterial hypertension, diabetes mellitus, heart disease, neoplasia, and chronic renal disease. Among these risk factors, age is emphasized, since, due to advances in the health area, there has been an increase in life expectancy, hence an increase in the demand of the elderly population for health services. At the same time, the elderly present a greater predisposition to the development of AKI, either due to kidney senility, or because of the high prevalence of comorbidities present, and medical interventions such as the use of contrasts and medications, which can also trigger AKI. Considering the relevance of the social role of the elderly and the scarcity of studies on AKI in the elderly admitted to the ICU, further studies are needed. This review article was elaborated considering the purpose: to assess incidence, risk factors, and mortality of AKI in elderly patients admitted to ICUs. Published studies were collected using the following inclusion criteria: be accessible in online databases (Lilacs, Scielo, and PubMed), have been published since 2000 and written in English, Portuguese, or Spanish. The descriptors used for the survey were “Acute Kidney Injury”, “Aging”, and “Elderly”. All items that did not fit in the above inclusion criteria were discarded. We have also presented a synthesis of the knowledge acquired during this review.

**Keywords:** comorbidities, risk factors, elderly, acute kidney injury, mortality, intensive care unit