

# Long-term mortality and cause of death for patients treated in Intensive Care Units due to poisoning.

[Lindqvist E](#)<sup>1,2</sup>, [Edman G](#)<sup>3,4</sup>, [Hollenberg J](#)<sup>2</sup>, [Nordberg P](#)<sup>2</sup>, [Forsberg S](#)<sup>1,2,5</sup>.

## [Author information](#)

### Abstract

#### BACKGROUND:

Poisoned patients treated in the Intensive Care Unit are common, representing up to 6% of all ICU admissions. The in-hospital mortality is generally low but little is known about the long-term mortality in these patients. The aim of this study was to describe long-term mortality and cause of death in patients treated in the ICU for poisoning.

#### METHOD:

A national observational study based on three registers: the National Patient Register, the Swedish Intensive Care Register and the Cause of Death Register. All patients  $\geq 19$  years admitted to a Swedish Intensive Care Unit between January 1, 2010 and December 31, 2011 with an ICD-10 code for poisoning were included.

#### RESULTS:

A total of 6730 patients were included. The one-year mortality was 4.5% ( $n = 303$ ), with an overweight of men among the deceased (59.1%,  $P = 0.002$ ). Patients aged 19-39 years had a 48 times increased one-year mortality compared to the age-matched general population and 94% of these patients died from suicide and/or accident, of which 70% were from a new poisoning. The two-year mortality was 7.2%. Women have a slightly higher overall long-term survival over two years ( $P < 0.001$ ).

#### CONCLUSION:

The risk of premature death is markedly increased in younger patients one and two years after an ICU hospitalisation for non-fatal poisoning compared to the general population. A large majority die due to a new poisoning incident despite a previously known recent severe poisoning.

#### EDITORIAL COMMENT:

Admission to ICU with poisoning, and particularly self-poisoning, may be associated with long-term mortality. In this study of 6730 patients admitted to a Swedish ICU for poisoning, the in-hospital mortality was low for that admission, but there is an increased risk of later mortality in young patients one and two years after hospital discharge.