Factors associated with mortality in patients with acquired human immunodeficiency virus infection hospitalized in an intensive care unit of a tertiary hospital in the city of Bogotá, Colombia, during the period 2017-2019.

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The outcome of the disease in critically ill patients with human immunodeficiency virus (HIV) or acquired immunodeficiency syndrome could be related to the different factors that can be derived from infectious or noninfectious processes. The objective of this study was to identify risk factors associated with mortality in patients with a diagnosis of HIV admitted to an intensive care unit.

Methods

This is a retrospective cohort with a single measurement of factors recorded in a sample of 110 patients treated in an ICU. The main factors associated with mortality in the ICU due to this disease were also investigated. The analysis was carried out from descriptive statistics and association tests between categorical variables. A logistic regression model was performed with the variables considered clinically relevant and those with a *P* value <0.1.

Results

Of the 110 HIV patients admitted to the ICU, 64 (58.2%) died. Anassociation was found between a Charlson index \geq 6 and mortality (OR = 2.3, 95% CI 1.0-5.1) and an increase in mortality in the first 21 days of ICU stay (OR = 2.2, 95% CI 1.0-4.9). In the logistic regression analysis, the absence of highly active antiretroviral therapy upon admission to the ICU and the first 21 days of ICU stay were associated with an increase in mortality.

Risk factor	OR *	Ρ	95% CI
Length of stay in ICU ≤ 21 days	23	0.049 **	1.0-5.4
HAART Therapy (-)	2.5	0.037 **	1.0-6.1
Charlson Index ≥6	1.8	0.174	0.7-4.2
Age ≥ 60	1.6	0.478	0.4-6.3

* OR adjusted with length of stay in the ICU \leq 21 days, HAART therapy (-), Charlson index \geq 6, age \geq 60. ** p < 0.05

A Charlson index ≥ 6 and the first three weeks of stay in the ICU are associated with mortality; additionally, advanced age is a contributing factor to this fact. In patients with HIV who are admitted to the ICU, the absence

of highly active antiretroviral therapy (HAART) will negatively impact mortality.