


Groundbreaking Research in The Lancet on the state of critical care in African hospitals

New research in The Lancet highlights the opportunity for saving lives at low-cost in African hospitals. The African Critical Illness Outcomes Study (ACIOS) provides the first comprehensive, continent-wide study into the prevalence and mortality of critical illness in Africa. The research conducted by the multinational research group APPRISE, including MUHAS, found that critical illness is far more common than has previously been thought and that most critically ill patients are cared for in general wards rather than ICUs. Strikingly, the study reveals a substantial gap in the provision of low-cost essential emergency and critical care such as oxygen and fluids. *There is a large potential for improved survival if this feasible care was implemented.*

Read more: <https://www.eccglobal.org/african-critical-illness-study>



ACIOS
African Critical Illness Outcomes Study


The African Critical Illness Outcomes Study

Methods

Investigators examined *all* adult in-patients in *all* wards and units in hospitals across Africa

Population


22 countries
180 hospitals
19,872 patients
Median age 40 years



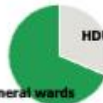
Baker T and The ACIOS Investigators (2025). 'The African Critical Illness Outcomes Study (ACIOS): A point prevalence study of critical illness in 22 nations in Africa'. The Lancet, 405: 715-24

How many are critically ill and where are they cared for?


12.5% hospital inpatients are critically ill




69% of critically ill patients are cared for in general wards




What EECG do they receive?

-  **48%** of patients with respiratory dysfunction receive oxygen
- 54%** of patients with circulatory dysfunction receive iv fluids or vasopressors
- 49%** of patients with a low conscious level receive an airway intervention
- 56%** of critically ill patients do not receive the EECG they require

In-hospital deaths

-  **21%** of critically ill patients die in-hospital within 7 days
- 2.7%** of non-critically ill patients die in-hospital within 7 days
- The odds ratio of mortality if critically ill is **7.7**

What does this mean?

 There is a large burden of critical illness in African hospitals. Ensuring that essential emergency and critical care (EECC) is provided to all critically ill patients has the potential to save many lives

Key Findings:

- **High Prevalence of Critical Illness:** 12.5% (1 in 8) of adult inpatients in hospitals are critically ill.
- **High Mortality of Critically Ill Patients:** 21% of critically ill die in hospital within seven days compared to 2.7% of non-critically ill patients.
- **Most Care is on General Wards:** 69% of the critically ill are being treated in general wards (not in specialized units)
- **Lack of Essential Emergency and Critical Care (EECC):** More than half of critically ill patients (56%) do not receive the low-cost and simple EECC they require, such as oxygen for respiratory failure and fluids for circulatory failure.

“Our findings should change the way we think about critical care. There is a much larger burden of critical illness than we previously thought. Simple, low-cost essential emergency and critical care is not being provided. Many deaths are preventable.”

Dr Tim Baker, First Author, ACIOS

Notes:

ACIOS is an international, prospective, point-prevalence study in acute hospitals across Africa. The study is a collaboration between universities in Tanzania, Ethiopia, Uganda, South Africa and the UK in the APPRISE partnership, funded by the National Institute for Health and Care Research (NIHR). Investigators examined all in-patients ≥ 18 years, regardless of location, to assess the co-primary outcomes of critical illness and seven-day mortality. Almost 20,000 patients were included in 180 hospitals in 22 countries.

Further information:

Please contact: Tim Baker, First Author, ACIOS

Email: tim.baker@ki.se

High-resolution images available upon request.