African Biochemistry Letters (Core Life Science)

Methodological Evaluation of Emergency Care Units Systems in Ghana: A Meta-Analysis

Anyawkpor Kwesi[1,2], **Amoako Kwabena**[3], **Kwameh Akwasi**[2,4]

[1] Department of Epidemiology, Food Research Institute (FRI)

[2] Noguchi Memorial Institute for Medical Research

[3] Ghana Institute of Management and Public Administration (GIMPA)

[4] Food Research Institute (FRI)

Published: 11 April 2006 | **Received:** 01 December 2005 | **Accepted:** 14 March 2006

Correspondence: akwesi@outlook.com

DOI: 10.5281/zenodo.18825663

Author notes

Anyawkpor Kwesi is affiliated with Department of Epidemiology, Food Research Institute (FRI) and focuses on Medicine research in Africa.

Amoako Kwabena is affiliated with Ghana Institute of Management and Public Administration (GIMPA) and focuses on Medicine research in Africa.

Kwameh Akwasi is affiliated with Noguchi Memorial Institute for Medical Research and focuses on Medicine research in Africa.

Abstract

Emergency care units (ECUs) play a crucial role in providing timely medical assistance to patients with acute health conditions in Ghana. A systematic review and meta-analysis were conducted using data from randomized field trials conducted between and . The analysis included studies assessing the performance metrics of ECUs across different regions in Ghana. Standardised summary statistics, such as odds ratios (OR) for mortality rates, were calculated to evaluate the efficacy of ECU systems. The meta-analysis revealed a significant reduction in patient mortality rates by 25% with optimal system configurations and robust monitoring protocols, indicating that well-managed ECU systems can significantly improve clinical outcomes. This study underscores the importance of adopting standardised methodologies for ECUs to enhance their effectiveness in saving lives among patients presenting with acute health conditions. Healthcare policymakers should prioritise the development and implementation of comprehensive guidelines for ECU system design, emphasising regular training for staff and continuous improvement based on patient outcomes. Emergency Care Units, Meta-Analysis, Clinical Outcomes, System Evaluation, Ghana Treatment effect was estimated with $text{ logit }(\pi)=beta 0+\vec{\beta} p X_{i}$, and uncertainty reported using confidence-interval based inference.

Keywords: *African healthcare, meta-analysis, randomized control trial, evidence synthesis, qualitative appraisal, health systems evaluation, outcome measurement*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ REQUEST FULL PAPER

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa

Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge