Life Support Foundation

Life Support Foundation önskar er alla en

God Jul och ett Gott Nytt År!

Den värld vi alla finner oss i detta år 2025 har förändrats, men inte längre alltid till det bättre. Arbete för andra människor i sämre lottade länder och områden har fått se sig möta bakslag. Mer än ett land har avslutat eller är på väg att dra ned sina bistånd till låginkomstländer. Afrika är här särskilt utsatt. Även från svenskt håll har sådana beslut annonserats så sent som för någon vecka sedan. Det som var osannolikt bara för några år sedan har blivit en verklighet idag. I det läget är den vision och de mål som finns för stiftelsen Life Support Foundation ännu mera betydelsefulla. En liten *'NGO' – non-governmental organisation* kan aldrig fylla de hål som stater lämnar efter sig om de drar sig ur sina åtaganden. Men vi kan genom fortsatt oförtrutet arbete visa att det finns ett annat sätt att se på relationer i världen, mellan resursstarka områden och andra mera utsatta platser. Låt oss därför ta nya tag, bygga vidare på våra utbyten och idéer, stödja och odla våra olika och fantastiska *'endorsed projects'* riktade söderut mot Nord- och Östafrika! Här kan Du läsa om det nyligen etablerade 'KEEP' – '*Kilimanjaro Educational Exchange Program*', om nya stora framsteg för 'EECC'—'*Essential Emergency Critical Care*'; om 'SESAC' --- *'Sweden Ethiopia Surgery Anaesthesia Collaboration'* och om 'ZEP' – *'Zanzibar Education Program*'; samt de lokala organisationerna i Tanzania och Malawi. Under våren 2026 ska hemsidan för Life Support Foundation uppdateras, samt mera finansiering för våra olika aktiviteter sökas. Det är med stolthet jag ser den här buketten av goda aktiviteter utvecklas, stående fria från de förändrade politiska tongångar som en pressad och mera krigshärjad värld håller sig med. Med dessa lite allvarsamt präglade ord, låt mig Claes Frostell i roll av ordförande i styrelsen till er alla förmedla en **GOD JUL och GOTT NYTT ÅR !**

Berättelser från året som gått:

Tack för ditt engagemang och bidrag till att göra delar av världen bättre genom att förbättra akut- och intensivvård!

Stort tack!

<u>Om SESAC</u> (endorsed project *'Swedish Ethiopian Surgery and Anaesthesia Cooperation'***),** vår styrelsemedlem Jonna Idh berättar:

SESAC har under 2025 fortsatt sitt arbete att på ideell väg stärka och förbättra kirurgi, intensivvård och anestesi i både Etiopien och i Sverige. Utrikesdepartementets reseavrådan till Gondar har kvarstått och möten har ägt rum i Addis (fem resor) och via videolänk.
Under mars 2025 besökte Peter Andersson och Kenth Johansson Black Lion Hospital för att facilitera genomförandet av den planerade endokrinkirurgiska workshopen "IAES/ INTEREST program". Sponsor var IAES (International Association of Endocrine Surgeons) och endokrinkirurger vid Black Lion Hospital gästades av två internationellt välrenommerade kollegor inom endokrinkirurgi. E av dem var SESAC:s Dr Kenth Johansson, kirurg och docent, från Västerviks sjukhus. Följde så en vecka med föreläsningar och workshops för att stärka den lokala kompetensen.SE
SAC:s ordförande Jonna Idh (undertecknad) deltog i april 2025 i en workshop i Dar es Salaam rörande EECC (Essential Emergency Critical Care), ett område som SESAC har sett ett stort behov av i Etiopien, men faktiskt även Sverige. Flera av SESAC:s medlemmar har engagerat sig i ett svenskt EECC-nätverk och har startat ett forskningssamarbete med Mr Fitsum Kifle, Network for Perioperative and Critical Care (N4PCC) i Addis Abeba. Läkarstudent Martin Johansson, Linköpings Universitet, fick därigenom möjlighet att genomföra sitt vetenskapliga arbete inom EECC och vi hoppas under 2026 kunna erbjuda en etiopisk läkarstudent att gästa Sverige för motsvarande forskningsvistelse.

Dr Gashaw Awoke, chef på anestesikliniken i Gondar, bjöds in att tala vid Svenska Föreningen för Anestesi och Intensivvårds årliga konferens (SFAI-dagarna) i Norrköping i september och deltog där tillsammans med Jonna Idh via länk vid The Nordic Network of Global Surgery and Anaesthesia's symposium om "Anaesthesia workforce".
SESAC har täckt årets utgifter med medel från IAES, IMP, Minor Field Studies (SIDA) och medlemmarnas privata medel. Stort tack till alla som sponsrat, engagerat sig och stöttat SESAC i stort som smått! God Jul hälsar styrelsen genom Jonna!

Dr Gashaw, Anestesiolog, Gondar University Hospital, på SFAI-dagarna i Norrköping 2025

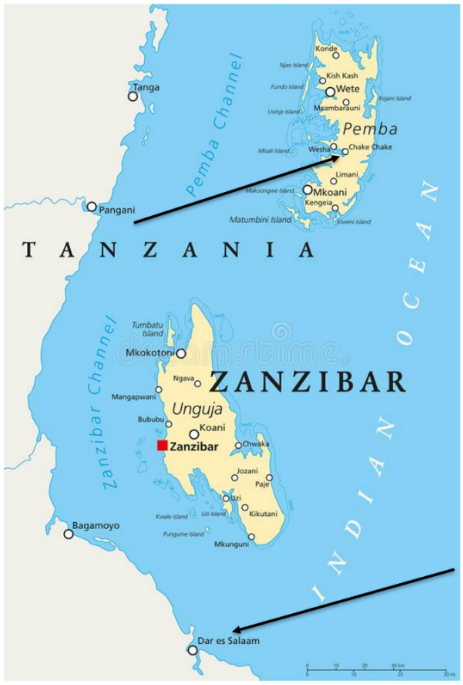
Dr Tsigereda och Dr Yonathan, Thoraxanestesiologer, Black Lion Hospital, Addis Abeba

<u>Om ZEP</u> (*endorsed project 'Zanzibar Education Program'*), vår styrelsemedlem och anestesiolog Pelle Conradi berättar:

Året började med att Siri Mårtensson från St. Görans Sjukhus i Stockholm fullgjorde en 3 månaders placering på sjukhuset Mnazi Mmoja Hospital på Zanzibar. En mycket lärorik tid som det gick att läsa om i förra årets julbrev. Under hennes placering hade arbetet med att utlokalisera sjukhusets olika verksamheter påbörjats och detta har dessvärre resulterat i att vi inte kunnat fortsätta skicka svenska ST-läkare till Mnazi Mmoja, som nu i det närmaste står tomt och väntar på omfattande renovering.

ZEP har dock under året etablerat kontakt med Vitongoji Hospital, det största sjukhuset på systerön Pemba (norrut -- se bild). Vi besökte sjukhuset i oktober och fick ett oerhört varmt mottagande. Sjukhuset har operativ verksamhet i såväl kirurgi, gynekologi, urologi och ortopedi med en stor förlossningsverksamhet med ca 5000 förlossningar/år. Anestesin sköts av ytterst ambitiösa anestesisjuksköterskor och sk 'anaesthetic technicians', men tyvärr saknar ön djupare anestesiologisk kompetens. Vi har i skrivande stund ett rykande färskt Memorandum of Understanding MoU) mellan ZEP och Vitongoji Hospital och vi kommer ha vår första svenska ZEP-läkare på plats from 5/1 2026. Vi hälsar således Dr Nima Elhami från Västerås välkommen som den första ZEP-läkaren till Pemba! Karibu Pemba!

Om samarbetet med Vitongoji Hospital faller väl ut kommer vi fortsättningsvis försöka erbjuda kliniska placeringar men då av mer erfarna specialister inom anestesi- och intensivvård för lite kortare men mer frekventa och riktade utbildningsinsatser som ska präglas av mer strukturerat arbete kring rutiner, strategier och patientsäkerhetsarbete. Sammanfattningsvis har 2025 varit ett utmanande år för ZEP, men i skrivande stund ser framtiden ljus ut för fortsatt kunskapsutbyte med anestesiverksamheten på Zanzibar.



<u>Om KEEP</u> (*<u>endorsed project</u>*, *'Kilimanjaro Educational Exchange Program'*)**,** vår nya styrelsemedlem professor Gunilla Björling berättar:

Året 2025 har varit ett betydelsefullt år för KEEP och Life Support Foundation. Genom fortsatt engagemang har flera viktiga steg tagits för att stärka utbildning, klinisk kompetens och det långsiktiga partnerskapet mellan Sverige och Kilimanjaro Christian Medical Centre (KCMC). Ett av årets höjdpunkter var de tre veckor långa studiebesöket i Sverige av barnmorska (chef) Enna Sengoka och Dr. Happy Masenga, anestesiolog). De besökte Södertälje Sjukhus, Danderyds Sjukhus, Karolinska Universitetssjukhuset, Jönköping University och Länssjukhuset Ryhov, där deras presentationer om arbetet på KCMC togs emot med stort intresse. Ett avgörande steg under året var att ett 'Memorandum of Understanding (MoU)' formellt undertecknades mellan KCMC University, KCMC Hospital och Life Support Foundation med KEEP som kontaktyta för all verksamhet. MoU:et fördjupar det långsiktiga samarbetet och öppnar för strukturerad utbildning, forskningssamarbeten och gemensamma satsningar för att stärka kompetensen inom 'critical care' i norra Tanzania. I februari 2026 reser Dr Berith Tingåker och Maria Hedström (barnmorskechef) från Södertälje sjukhus till KCMC för att inleda praktiskt samarbete på plats, bland annat genom att utveckla en kurs i handhavande av epidural i samband med operation och förlossning. Ett identifierat behov både av läkare och sjuksköterskor vid KCMC. KEEP deltar också i ett större projekt med målet att etablera ett masterprogram i 'critical care nursing', ett område med stort behov av specialistkompetens. Programmet ska stärka specialistkompetensen inom såväl intensivvård, operationssjukvård som anestesi, områden med mycket begränsad tillgång till utbildad personal i Tanzania. Vi gläds även åt att Enna Sengoka publicerat sin vetenskapliga artikel "Experience Maternal Near Miss in Tanzania "; som belyser komplexa och ofta livshotande situationer i samband med graviditet och förlossning (se referens i slutet av julbrevet). Studien bidrar med viktig kunskap för kommande klinisk förbättring och utbildning. Med stor framtidstro går vi in i 2026! Tillsammans fortsätter vi att bygga broar mellan våra länder och skapa förutsättningar för säker, personcentrerad och kunskapsbaserad vård – där den behövs som allra mest. Vi tackar för ert stöd under året och ser fram emot att fortsätta detta viktiga utvecklingsarbete tillsammans.

EECC Annual Report 2025 (*EECC – as 'endorsed project' -- Essential Emergency Critical Care*).

Dr Tim Baker berättar, här på engelska:

This year has been a period of meaningful growth for EECC. We have produced more research than ever before, we implemented EECC in hundreds of health facilities, we produced face-to-face training materials, deepened partnerships across the world and massively increased our global network. Through workshops, champions, national Hubs, and steady communication with members, our clear and strong vision for how essential emergency and critical care can be delivered is spreading. None of this would be possible without the commitment of clinicians, researchers, partners, and supporters across the world.

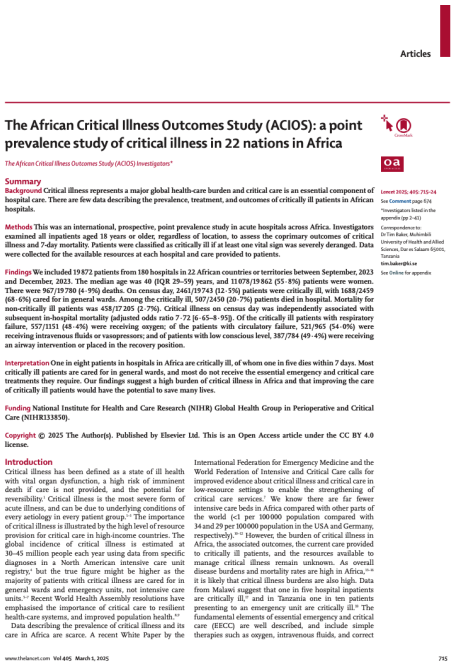
Dayana, a seven-month-old baby, was rushed to hospital after days of fever, vomiting, and worsening breathing. By the time she arrived, she was dangerously weak and struggling for every breath. A nurse trained in EECC immediately checked her vital signs and started oxygen therapy, calling for a doctor to assist. Tests confirmed pneumonia, and she was admitted for antibiotics and ongoing monitoring. Over the next week, her oxygen needs lessened, her breathing eased, and she grew stronger. Soon she was smiling and playful again, ready to return home.

Dayana's story shows how EECC transforms a child's near-fatal illness into recovery.

Research

This year saw the publication of several important studies that continue to build the scientific foundation for EECC.

African Critical Illness Outcomes Study (ACIOS)



Articles

The African Critical Illness Outcomes Study (ACIOS): a point prevalence study of critical illness in 22 nations in Africa

The African Critical Illness Outcomes Study (ACIOS) Investigators*

Summary

Background Critical illness represents a major global health-care burden and critical care is an essential component of hospital care. There are few data describing the prevalence, treatment, and outcomes of critically ill patients in African hospitals.

Methods This was an international, prospective, point prevalence study in acute hospitals across Africa. Investigators examined all inpatients aged 18 years or older, regardless of location, to assess the coprimary outcomes of critical illness and 7-day mortality. Patients were classified as critically ill if at least one vital sign was severely deranged. Data were collected for the available resources at each hospital and care provided to patients.

Findings We included 19 872 patients from 180 hospitals in 22 African countries or territories between September, 2023 and December, 2023. The median age was 40 (IQR 29–59) years, and 11 078/19 862 (55·8%) patients were women. There were 967/19 780 (4·9%) deaths. On census day, 2461/19 743 (12·5%) patients were critically ill, with 1688/2459 (68·6%) cared for in general wards. Among the critically ill, 507/2459 (20·7%) patients died in hospital. Mortality for non-critically ill patients was 458/17 205 (2·7%). Critical illness on census day was independently associated with subsequent in-hospital mortality (adjusted odds ratio 7·72 [6·65–8·95]). Of the critically ill patients with respiratory failure, 557/1151 (48·4%) were receiving oxygen; of the patients with circulatory failure, 521/965 (54·0%) were receiving intravenous fluids or vasopressors; and of patients with low conscious level, 387/784 (49·4%) were receiving an airway intervention or placed in the recovery position.

Interpretation One in eight patients in hospitals in Africa are critically ill, of whom one in five dies within 7 days. Most critically ill patients are cared for in general wards, and most do not receive the essential emergency and critical care treatments they require. Our findings suggest a high burden of critical illness in Africa and that improving the care of critically ill patients would have the potential to save many lives.

Funding National Institute for Health and Care Research (NIHR) Global Health Group in Perioperative and Critical Care (NIHR133850).

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Introduction

Critical illness has been defined as a state of ill health with vital organ dysfunction, a high risk of imminent death if care is not provided, and the potential for reversibility.[1] Critical illness is the most severe form of acute illness, and can be due to underlying conditions of every aetiology in every patient group.[1,2] The importance of critical illness is illustrated by the high level of resource provision for critical care in high-income countries. The global incidence of critical illness is estimated at 30–45 million people each year using data from specific diagnoses in a North American intensive care unit registry,[3] but the true figure might be higher as the majority of patients with critical illness are cared for in general wards and emergency units, not intensive care units.[4,5] Recent World Health Assembly resolutions have emphasised the importance of critical care to resilient health-care systems, and improved population health.[6,7]

Data describing the prevalence of critical illness and its care in Africa are scarce. A recent White Paper by the International Federation for Emergency Medicine and the World Federation of Intensive and Critical Care calls for improved evidence about critical illness and critical care in low-resource settings to enable the strengthening of critical care services.[8] We know there are far fewer intensive care beds in Africa compared with other parts of the world (<1 per 100 000 population compared with 34 and 29 per 100 000 population in the USA and Germany, respectively).[9,10] However, the burden of critical illness in Africa, the associated outcomes, the current care provided to critically ill patients, and the resources available to manage critical illness remain unknown. As overall disease burdens and mortality rates are high in Africa,[11–14] it is likely that critical illness burdens are also high. Data from Malawi suggest that one in five hospital inpatients are critically ill,[15] and in Tanzania one in ten patients presenting to an emergency unit are critically ill.[16] The fundamental elements of essential emergency and critical care (EECC) are well described, and include simple therapies such as oxygen, intravenous fluids, and correct

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See Comment page 674
*Investigators listed in the appendix (pp 2–41)
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See Online for appendix

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Published in The Lancet, ACIOS is the most comprehensive description of critical illness in African hospitals. Key findings include:

- A high prevalence of critical illness: 12.5% (1 in 8) of adult inpatients in hospitals are critically ill.
- Most care is on general wards: 69% of the critically ill are being treated in general wards rather than in specialized units
- High mortality of critically ill patients: 21% of critically ill patients die in hospital within seven days, compared to just 2.7% of non-critically ill patients.
- Lack of 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.

Hospital Transport and Patient Deterioration Study

This study explores what happens when critically ill patients are moved between services or hospitals. It showed that long delays, limited equipment, and poor communication contribute to deterioration during transport. The findings highlight that the design and organisation of hospitals do not facilitate quick, short, and safe transport for critically ill patients, that hospitals lack the resources needed for safe and effective transportation and that there are weaknesses in the preparation for, conduct of, and handover of information concerning the transportation of critically ill patients.

Original Research

Critically ill patients are not just luggage: The experiences of health workers on the transportation of critically ill patients in hospitals in Tanzania

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Abstract
Background: Critical illness is a life-threatening condition impacting millions of patients globally each year. Critically ill patients often need to be transported within the hospital during their care and the safety and efficiency of transportation are key for good health outcomes. There is a lack of knowledge about the processes and safety of intra-hospital patient transport in low-resourced health care settings.
Objective: This study aimed to understand health workers' experiences of the process and the safety of intra-hospital transportation of critically ill patients in Tanzania.
Methods: Qualitative in-depth interviews were conducted with 15 health workers involved in the care and transportation of critically ill patients in five Tanzanian hospitals. Purposive sampling identified participants. Data were analysed using thematic analysis, guided by the Donabedian quality of care framework.

The Lancet Global Health Commission

Reducing global inequities in medical oxygen access: the *Lancet Global Health* Commission on medical oxygen security

Hamish R Graham*, Carina King*, Ahmed Ehsanur Rahman, Freddy Eric Kitutu, Leith Greenslade, Masanna Aqeel, Tim Baker, Lucia Flavia de Magalhães Brito, Harry Campbell, Karen Cataldie, Mike English, Adegoke G Falade, Patricia J Garcia, Mireia Gil, Stephen M Graham, Amy Z Gray, Stephen R C Howie, Niranjan Kissoon, Ramanan Laxminarayan, Inês Li Lin, Michael S Lipnick, Dianne B Love, David Lowrance, Eric D McCollum, Tsiyaporne Mnala, Jacquie Oliwa, Stefan Swartling Peterson, Rodet Sheiwiles Warkneh, Heather J Zar, Shams El-Adhami†, Freddie Ssengooba†

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Executive summary

"Oxygen delayed is life denied."
—Person who survived COVID-19, Kenya

Medical oxygen is an essential treatment that has been in clinical use for more than 150 years. It is required at every level of the health-care system for children and adults with a wide range of acute and chronic conditions and to ensure safe surgery and perioperative care, and thus must be available to everyone who needs it. The COVID-19 pandemic shone a spotlight on the long-standing inequities in access to medical oxygen globally, and the importance of this life-saving therapy to people of all ages in every part of the world. It was against this backdrop that the *Lancet Global Health* Commission on medical oxygen security was launched in 2022, with the aim of synthesising available evidence and harnessing expertise to produce concrete and actionable recommendations for governments, industry, global health agencies, donors, the health-care workforce, and researchers.

Our work emphasises that provision of oxygen is an essential public service, not just a commodity or commercial product, and that achieving equitable oxygen access will require a systems approach addressing multiple domains (production, storage, distribution, supply, clinical use, coordination, regulation, and financing) across the health, education, energy, industry, and transport sectors. Previous efforts, including major investments in response to the COVID-19 pandemic, largely focused on the delivery of equipment to produce more oxygen, but did not invest in the systems and people required to ensure equipment is distributed, maintained, and used safely and effectively. Key findings from this Commission show how future investment in strengthening oxygen systems could have a huge impact by saving millions of lives, accelerating progress towards the Sustainable Development Goals (SDGs), and preparing the world for future pandemics.

The global need for medical oxygen is high

Each year, 374 million people need medical oxygen: 364 million in acute medical and surgical contexts, and 9 million with long-term oxygen needs due to chronic obstructive pulmonary disease. 306 million (82%) of the 374 million people who need oxygen live in low-income and middle-income countries (LMICs), 253 million (68%) in south Asia, east Asia and the Pacific, and sub-Saharan Africa. Patients with acute medical and surgical needs require a minimum of 1·2 billion normal cubic metres (Nm³) of medical oxygen annually. This need is rising, driven by population growth and unmet surgery and long-term oxygen therapy needs. Efforts to prevent oxygen need are critical, and include immunisation, smoking prevention and cessation, reductions in malnutrition and indoor and outdoor air pollution, and mitigation of climate change. During emergencies (eg, epidemics, natural disasters, war), the need for oxygen can increase exponentially, putting enormous pressure on health systems. In 2021, an additional 52 million patients needed 1·9 billion Nm³ of oxygen to treat COVID-19 globally.

Global access to medical oxygen is highly inequitable

There are huge gaps in oxygen coverage in many LMICs despite investments since the COVID-19 pandemic. We found that more than 5 billion people—ie, more than 60% of the world's population—do not have access to safe, quality, and affordable medical oxygen services. In LMICs, only 89 million (30%) of the 299 million people who need oxygen for acute medical or surgical conditions receive adequate oxygen therapy, with the lowest access in sub-Saharan Africa. The coverage gap for medical oxygen in LMICs is thus 70%, which far exceeds those for HIV/AIDS (23%) and tuberculosis (25%) treatments. Major contributors to the oxygen coverage gap include people not reaching a health facility, facilities lacking basic oxygen service capacity, failure to identify oxygen need due to the unavailability of pulse oximetry, interrupted, unsafe, or otherwise low-quality oxygen care, and high costs for patients. In LMICs, pulse oximeters are available in only 54% of general hospitals and 83% of tertiary hospitals, and oxygen therapy is available in only 58% of general hospitals and 86% of tertiary hospitals. Frequent shortages and equipment breakdown result in the need to ration care, which is a source of moral distress for health-care workers. In primary health-care facilities in LMICs, pulse oximeters and oxygen are nearly entirely unavailable.

The cost of filling the oxygen gap is high but oxygen is a highly cost-effective investment

We estimate that closing the large acute medical and surgical oxygen coverage gap in LMICs will require an additional US$6·8 billion annually, equating to $34·0 billion in the next 5 years. This estimate does not

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Realising the Benefit of Medical Oxygen

The Lancet Global Health Commission on Medical Oxygen Security reported this year, and included EECC. It provided a systems view of why hospitals struggle with reliable oxygen and described the importance of basic processes for oxygen safety and delivery. Key findings include:

- 60% of people continue to lack access to oxygen
- 82% of those in need (306 million) are in Low and Middle Income Countries, where coverage of oxygen is only 30%
- The global need for oxygen is rising due to aging populations, lifestyle factors and air pollution.
- Only 54% of LMIC hospitals have pulse oximeters, the simple equipment that identifies a patient's need for oxygen
- $6.8billion is required each year to provide oxygen to all, and that oxygen is a highly cost effective investment compared to other health related interventions, at just $59 per healthy life-year saved.

Published alongside the Commission's report was an EECC commentary describing how to "*realise the benefits of oxygen through essential emergency and critical care*". The key message is that oxygen will save lives when delivered as part of broader essential emergency and critical care. The commentary calls on governments, WHO, funders and professional societies to embed EECC into policies, guidelines and health benefit packages. The pandemic brought attention to oxygen, but without the wider EECC package its full impact cannot be realised.

Hospital Burden of Critical Illness across Global Settings

Published in BMJ Global Health, this study shows the scale of critical illness among admitted patients across diverse contexts. Key findings include:

- Critical Illness prevalence is high: 12% (1 in 8) of patients in hospitals are critically ill.

Original research

BMJ Global Health

Hospital burden of critical illness across global settings: a point prevalence and cohort study in Malawi, Sri Lanka and Sweden

Carl Otto Schell, Raphael Kazidule Kayambankadzanja, Abi Beane, Andreas Wellhagen, Chamira Kodippily, Anna Hvarfner, Grace Banda, Natayini Jegathesan, Christoffer Hintze, Wageesha Wijesiriwardana, Martin Gerdin Wärnberg, Jayasingha Arachchilage Sujeewa, Mtisunge Kachingwe, Petronella Bjurling-Sjöberg, Isaac Mbingwani, Annie Kalibwe Mkandawire, Hampus Sjöstedt, Wezzie Kumwenda-Mwafulirwa, Surenthirakumaran Rajendra, Odala Kamandani Dzinjalamala, Cecilia Stalsby Lundborg, Kwazizira Samson Mndolo, Miklós Lipcsey, Rashan Haniffa, Lisa Kurland, Markus Castegren, Tim Baker

ABSTRACT

Introduction The burden of critical illness may have been underestimated. Previous analyses have used data from intensive care units (ICUs) only, and there is a lack of evidence about where in hospitals critically ill patients receive care. This study aims to determine the burden of critical illness among adult inpatients across hospitals in different global settings.

Methods We performed a prospective, observational, hospital-based, point prevalence and cohort study in countries of different socioeconomic levels: Malawi, Sri Lanka and Sweden. On specific days, all adult in-patients in the eight study hospitals were examined by the study team for the presence of critical illness and followed up for hospital mortality. Patients with at least one severely deranged vital sign were classified as critically ill. The primary outcomes were the presence of critical illness and 30-day hospital mortality. In addition, we determined where the critically ill patients were being cared for and the association between critical illness and 30-day hospital mortality.

Results Among 3602 hospitalised patients, we found a point prevalence of critical illness of 12.0% (95% CI 11.0 to 13.1), with a hospital mortality of 18.7% (95% CI 15.3 to 22.6). The crude OR of death of critically ill patients compared with non-critically ill patients was 7.5 (95% CI 5.4 to 10.2). Of the critically ill patients, 96.1% (95% CI 92.9 to 97.6) were cared for in the general wards outside ICUs.

Conclusions The study has revealed a substantial burden of critical illness in hospitals from different global settings, [illegible] throughout hospitals would impact a large number of high-risk patients and has the potential to improve outcomes across all acute care specialities.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Critical illness has been defined as ill health with vital organ failure and a high risk of imminent death if care is not provided.

⇒ Provision of timely care to stabilise vital organ function of critically ill patients (critical care) can prevent mortality.

⇒ The global burden of critical illness has not been accurately determined. Existing estimates have been based on data only from intensive care units (ICU), a high-cost resource with widely varying availability between settings, and have not included critically ill patients in other hospital wards and units.

⇒ The global incidence of critical illness has been estimated to be 30–45 million adults, and the hospital mortality of critically ill patients in ICUs has been estimated to be 22%.

INTRODUCTION

Critical illness is as a 'state of ill health with vital organ dysfunction, a high risk of imminent death if care is not provided and the potential for reversibility'.[1] Regardless of

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Lessons learned from the promotion of Essential Emergency and Critical Care in Tanzania – a qualitative study

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ABSTRACT

Objective To describe the lessons learnt during the promotion of a new approach to the care of critically ill patients in TanzaniaEssential Emergency and Critical Care (EECC).

Design A descriptive qualitative study using thematic analysis of structured interviews.

Setting and participants The study was conducted in Tanzania, involving 11 policymakers, researchers and senior clinicians who participated in the promotion of EECC in the country.

Findings Five inter-related themes emerged from the promotion of EECC in Tanzania: (1) early and close collaboration with the government and stakeholders; (2) conduct research and use evidence; (3) prioritise advocacy and address misconceptions about EECC; (4) leverage events and embed activities in other health system interventions; and (5) employ a multifaceted implementation strategy. The themes map to the normalisation process theory domains of coherence, cognitive participation, collective action and reflexive monitoring.

Conclusion The integration of EECC into Tanzania's health policy is a result of a multidisciplinary collaboration including government and partners that has used evidence, advocacy and context and included multifaceted implementation strategies. The lessons from Tanzania's experience provide guidance for adoption in similar settings to improve critical care systems, foster access to care and optimal outcomes for all critically ill patients.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ High credibility of findings due to the in-depth qualitative data collection process and the inclusion of diverse participants, with in-depth explorations until data saturation was reached.

⇒ Iterative sharing of findings with participants to ensure the findings align with lived experiences.

⇒ Absence of transcription and translation of the interviews; instead, a codebook and audio recordings were used for cross-referencing, which may have led to some relevant information being missed.

⇒ Some individuals who might have provided additional perspectives were not included in the study, limiting the diversity of viewpoints and experiences that could be explored.

⇒ Participants may have altered their reflections to align with what they perceived to be desirable to the interviewer.

INTRODUCTION

Illness can progress in severity[1] if appropriate care is not provided. Progression to the most severe stage of any acute illness, regardless of a patient's age, gender, social status or medical condition, is termed 'critical illness'.[2] Critical illness is characterised by vital organ dysfunction, a high risk of imminent death if care is not provided and the potential for reversibility.[3] Critical illness is strikingly common—approximately 1 in 10 patients either arriving to hospital or being treated in hospital are critically ill.[4–6] Globally, it is estimated that 45 million adults become critically ill each year.[7] While the burden of paediatric critical illness is unknown,[8] sepsis and pneumonia are the leading causes of children's mortality and 7 million children require oxygen for pneumonia each year.[9 10] The need for improving the care of critical illness globally and especially in low-resource settings is increasingly recognised.[11–13]

In Tanzania and other low-income countries, the burden of critical illness is high, yet health systems often lack the capacity to provide timely and effective care for critically ill patients. More than 90% of critically ill patients are cared for in general hospital wards, rather than specialised units.[14] Healthcare providers in these wards frequently are not capacitated to identify deterioration of patients early and provide essential life-saving interventions.[15] Studies from similar settings have shown that these critically ill patients do not receive basic, life-saving supportive care

- Care is almost always on General Wards: 96% of the critically ill are being treated in general wards rather than in specialized units
- Critically ill patients have a high mortality: 19% of critically ill patients die in hospital within 30 days (compared to 3% of those not critically ill)
- The findings are consistent in high and low resource settings

Lessons learned from the promotion of Essential Emergency and Critical Care in Tanzania

This study described how Tanzania successfully promoted and integrated EECC into national policy. Drawing on interviews with policymakers, clinicians, researchers and implementation partners, the research identifies the practical lessons, strategies and enablers that supported EECC adoption across the health system. These insights offer valuable guidance for countries seeking to strengthen the care of critically ill patients. It is important to:

- Work with the government early and consistently.
- Use strong evidence to drive understanding and action.
- Communicate clearly to correct misconceptions about EECC.
- Use windows of opportunity, such as COVID-19, to advance EECC.
- Embed EECC within existing health programmes.
- Implement EECC through a multifaceted, system-wide approach.

At just four months old, Baby Deborah was rushed to hospital by her worried parents, struggling to breathe. A nurse trained in EECC immediately saw she was critically ill, with low oxygen and rapid breathing. She was taken to the resuscitation room, given oxygen, and positioned to ease her breathing. Gradually, her oxygen levels improved. Deborah was diagnosed with severe pneumonia and admitted for antibiotics and continued monitoring. Over the next four days, she grew stronger, her breathing normalised, and she was smiling again.

Her survival shows how EECC equips frontline staff to save babies' lives with simple, timely care.

Implementation in Tanzania

The EECC in Tanzania programme (EECCiT) implemented EECC in >300 health facilities in 5 regions of mainland Tanzania and Zanzibar during 2025.

Preliminary findings after implementing EECC include:

- Health workers successfully identifying and managing critically ill patients using EECC processes
- Improvements in observation of vital signs, teamwork, and rapid responses
- Positive engagement of regional, district and facility leaders that improves the availability and readiness of essential equipment and supplies
- Increased coverage of EECC. More hypoxic patients receiving oxygen. More shocked patients receiving intravenous fluids. More unconscious patients having their airway protected.
- Improved outcomes of critically ill patients

Feedback from the implementation:

Hospital Lead
Dr Stanford Ngeta, head of Vwawa District Hospital in Songwe Region, reports that the EECC programme has changed the way staff recognise and manage critical illness. He describes earlier identification of danger signs, greater confidence among health workers, and faster responses when patients become unwell. He notes that staff now have a clearer understanding of what to do in emergencies and EECC has prevented avoidable deterioration in patients.

Regional Lead
Dr Jonathan Budega, Regional Medical Officer in Katavi Region, reflects on the wider improvements taking place across facilities. He highlights better hospital readiness, more consistent recognition of critical illness, and stronger supervision and follow up. He also reports reductions in maternal and newborn deaths linked to more reliable early care. Dr Budega describes this progress as something that has “never happened in history,” emphasising the scale of change underway.

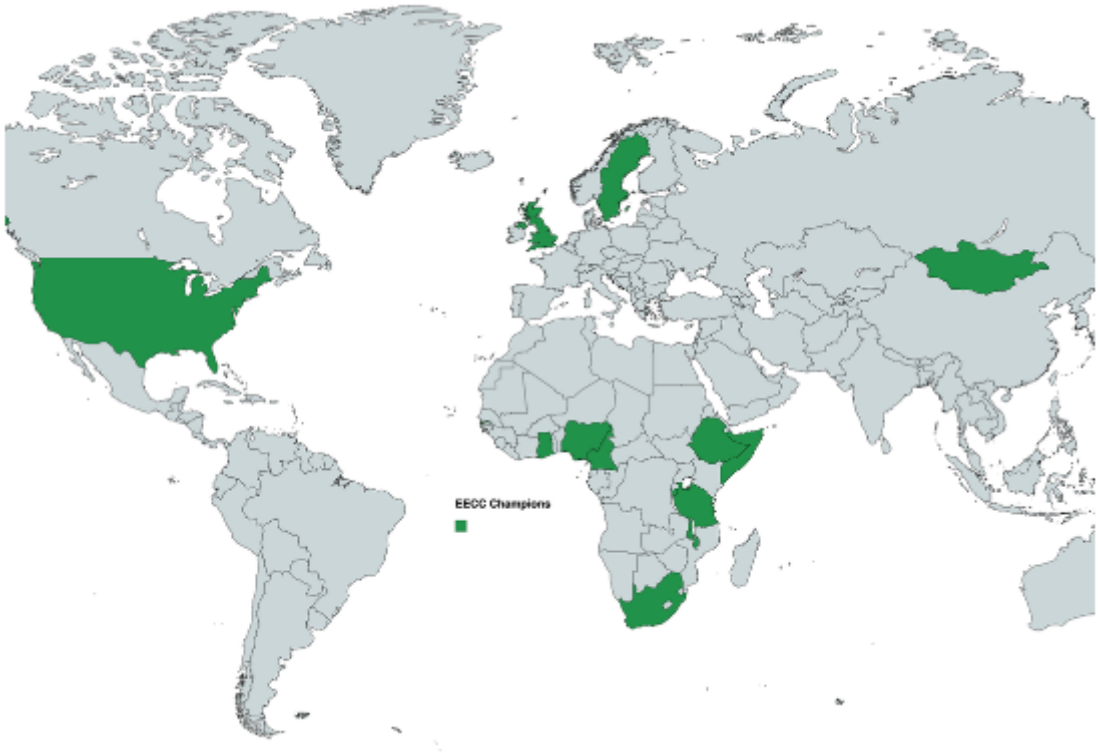
Amina, 20, arrived at a district hospital in Tanzania bleeding heavily after a miscarriage. She was pale, weak, and in shock, with dangerously low blood pressure. A nurse trained in EECC quickly recognised her condition and called for help. Together, the team inserted an intravenous line, rapidly gave fluids, and raised her legs to keep blood flowing to her brain and vital organs. Within minutes, Amina's strength began to return and her vital signs improved. After further treatment on the ward, she made a full recovery and returned home to her child.

Her story highlights how EECC saves mothers from preventable emergencies.

Champions Workshop

An EECC Champions Workshop was held in Dar es Salaam in May. This three-day event brought together experienced clinicians, educators, and early adopters of EECC. Participants from Tanzania, South Africa, Ethiopia, Sweden, Malawi, Burundi, Gambia and Somalia explored issues around EECC, including the clinical processes and the hospital readiness requirements, practised ward based scenarios and discussed barriers to implementation in their own settings.

The workshop deepened understanding, strengthened advocacy skills, and supported participants to develop realistic action plans for their hospitals. By the end of the workshop all participants became EECC Champions and each left with a plan to strengthen early identification of critical illness, improve teamwork, support training in their facility, and raise awareness among colleagues. There are now 116 EECC Champions.



Growth of National Hubs and Groups

There are now 10 EECC National Hubs promoting and implementing EECC in their countries.

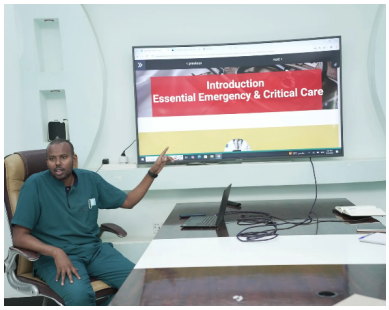
Malawi

In Malawi, the Hub is planning a national EECC assessment, has conducted a national training workshop in Lilongwe. major training workshop, and is strengthening advocacy with hospital and government partners.

South Africa

The South Africa Hub is advancing EECC through research planning, readiness assessments and clinical training. The team is conducting research, drafting readiness assessment protocols for major obstetric units, and conducting simulation-based EECC workshops.

Somalia



In Somalia, the Hub continues facility assessments, training, and EECC online learning at Royal and Demartino Hospitals. The team is collaborating with the Somali ICU and Development Hub and strengthening links with Somaliland colleagues. Shared action plans and ongoing training are helping shape a national approach to integrating EECC across Somali hospitals.

Ethiopia

The Ethiopia Hub has completed EECC assessments in 20 Addis Ababa hospitals and shared results with the Ministry of Health. Funding has been approved for national training and leadership workshops. The team is preparing for the All-African Emergency Care Conference and strengthening academic collaboration through trainee exchange activities.

Burundi

The Burundi Hub is progressing with a national nurse mentor initiative. Recruitment and training of seven mentors are under way, alongside French translation of EECC materials and a December 2025 training-of-trainers programme. The Hub's action plan guides assessments, mentorship, and early system-wide engagement across Burundi.

Gambia

In The Gambia, national engagement is expanding through registration with the Ministry of Justice and outreach to hospitals and clinics. The team is rolling out VSDT charts, running workshops on recognising deterioration, and seeking accreditation with African and global critical care nursing bodies to strengthen EECC implementation nationwide.

Nigeria

The Nigeria Hub has established a national Working Group and eight zonal teams. Current work includes baseline assessments using the EECC facility tool, delivery of standardised education sessions, and preparations for national conference participation. Nigeria is also supporting the formation of a West Africa Regional Group to expand EECC across the region.

United Kingdom

The UK Hub is strengthening EECC collaboration through partnerships with SAFE Anaesthesia, the IRC network, and specialist equipment providers. The team is supporting international training efforts by sourcing essential supplies, including low-cost airway manikins, and exploring funding opportunities through WFSA and other networks to advance EECC education and global implementation.

Sweden

The Sweden Hub is advancing EECC through implementation research, training development, and international advocacy. Recent activities include a national network meeting, a Hub follow-up meeting, and preparations for a 2026 Champion Workshop. The team continues to coordinate EECC learning and outreach across regions, guided by Sweden's 2025–2026 national agenda.

There are an additional 6 EECC Groups with 7 other countries pending - groups of motivated EECC practitioners looking to expand EECC activities in their countries. The Rwanda group, supported by the Rwanda Anesthetists Organisation, has held its first meeting and submitted a national proposal. Plans include assessments in six institutions, partnerships with NGOs and coordination with regional training initiatives. The Somaliland group is preparing for its first EECC training at Hargeisa Group Hospital. The emerging group is supported by the Somaliland Emergency Medicine Association and is building action plans and regional partnerships to sustain EECC activities. The Mauritania group has formed a diverse clinical team and met with the Minister of Health to request recognition and space for training. The group is preparing early activities while expanding membership and organisational capacity. The Nepal group is conducting a multi-hospital study assessing EECC readiness, availability of resources and workforce capacity.The Ghana group's training at Komfo Anokye Teaching Hospital has led to new plans for structured handovers, basic triage and expansion to other hospitals. The team is integrating EECC thinking into ward routines and morning reporting.

Training and job aids

Training is a key aspect of EECC implementation. It gives health workers structured skills to identify and act early while also supporting communication and teamwork. EECC training has been strengthened through 2025 across multiple areas:

- A 3-day face-to-face EECC course was developed and refined through delivery in Tanzania and is now available open access and free including facilitator manuals, pocket handbooks, slide decks, and evaluation materials
- Health workers reported increased confidence, improved understanding of early warning signs, and a stronger sense of responsibility in emergencies
- Multiple participants described how simulation, structured scenarios, and teamwork exercises improved real world performance

The EECC Network

The EECC Network has grown to 1700 members in 127 countries at the end of 2025.

Life Support Foundation Tanzania Chapter Annual Report 2025

INTERIM COMMITTEE

Karima Khalid, Suzan Mbonde, Rodgers Swai, Khamis Waziri

Introduction

Life Support Foundation (LSF) is an international, independent, medical organization aiming to prevent deaths due to acute, life-threatening conditions in low-income countries through improving the access to and quality of basic life-saving interventions. The Tanzanian Chapter aims to work on this mission locally and internationally.

2025-12-17: *Tyvärr -- fick vi inte deras rapport från år 2025 i tid för att nå det julbrev 2025, svenska versionen, som måste postas 'snigelpost' före jul. När vi mottagit den, ska den per mail skickas Er separat samt finnas upplagd på hemsida Life Support Foundation.*

MALAWI (from Thomson Mbewe's reports)

LIFE SUPPORT FOUNDATION MALAWI WORKING GROUP 2025 ANNUAL REPORT.

Introduction

Life Support Foundation Malawi working group, was established in 2018 after observing the increase in number of preventable deaths in Malawi. The working group began its project with three members and its first was Queen Elizabeth central hospital. Over the years the working group grew and extend its services to other hospitals such us Kamuzu Central Hospital, Thyolo District Hospital and Balaka District Hospital. Due to a good number of improvements that the hospitals trained in critical care are doing they are setting as examples for other hospitals that were not trained and this is making the working group to receive huge number of funding applications from different parts of Malawian hospitals.

2025-12-17: *Tyvärr -- fick vi inte deras rapport från år 2025 i tid för att nå det julbrev 2025, svenska versionen, som måste postas 'snigelpost' före jul. När vi mottagit den, ska den per mail skickas Er separat samt finnas upplagd på hemsida Life Support Foundation. Vi väljer att här trycka den redovisning av en workshop som nyligen genomfördes i Lilongwe, Malawi:*

Lilongwe EECC Training update: *Hi Tim {Baker},*

Just wanted to update you on the EECC training that we are having in Lilongwe. the training started on high note as all the participants were seen to have high expectations, there was no dull moment as the friends from Tanzania were also busy making sure that nothing from EECC should be missed.

We are hoping for the best as will be continuing today and finish tomorrow, just to brief you, this training has participants from five different hospitals and representatives from academia as well.

More information will be presented in the main report. Attached are some of the pictures taken during the training

Yours // thom { sent to Sweden in early December, 2025 }

Utdrag av publicerade arbeten år 2025 (finns i *'public domain'*)

- Kaliza AC, Mlunde LB, Schell CO, Khalid K, Sawe H, Mkumbo E, Kigombola A, Mwandalima I, Sylvanus E, Kilindimo S, Lugazia ER, Masuma JS, Baker T.
  Lessons learned from the promotion of Essential Emergency and Critical Care in Tanzania - a qualitative study.
  BMJ Open. 2025 Oct 29;15(10):e089229. doi: 10.1136/bmjopen-2024-089229.
  PMID: 41161838 Free PMC article.
  OBJECTIVE: To describe the lessons learnt during the promotion of a new approach to the care of critically ill patients in Tanzania Essential Emergency and Critical Care (EECC). DESIGN: A descriptive qualitative study using thematic analysis of structured interviews.

- Schell CO, Kayambankadzanja RK, Beane A, Wellhagen A, Kodippily C, Hvarfner A, Banda G, Jegathesan N, Hintze C, Wijesiriwardana W, Gerdin Wärnberg M, Sujeewa JA, Kachingwe M, Bjurling-Sjöberg P, Mbingwani I, Kalibwe Mkandawire A, Sjöstedt H, Kumwenda-Mwafulirwa W, Rajendra S, Dzinjalamala OK, Lundborg CS, Mndolo KS, Lipcsey M, Haniffa R, Kurland L, Castegren M, Baker T.
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- Sengoka EG, Björling G; Mahande MJ, Mattsson J; Masenga J. *Lived experiences of maternal near misses: a qualitative study in the Kilimanjaro Region, Tanzania.*
  Reprod Health 2025 May 26;22(1):92. doi: 10.1186/s12978-025-02018-w. PMID: 40420072

- Working group, many authors, Baker et al xxx. *The African Critical Illness Outcomes Study (ACIOS): a point prevalence study of critical illness in 22 nations in Africa.*

  Lancet 2025 Mar 1;405(10480):715-724. doi: 10.1016/S0140-6736(24)02846-0.
  PMID: 40023650

- Ytterligare fina publikationer från EECC -- se deras rapport en bit upp i julbrevet!

Tack för ditt bidrag under 2025! Bli månadsgivare- och rädda liv!

För styrelsen: ***Tim Baker, Henrik Jörnvall, Claes Frostell, Per Conradi, Gunilla Björling och Jonna Idh***

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