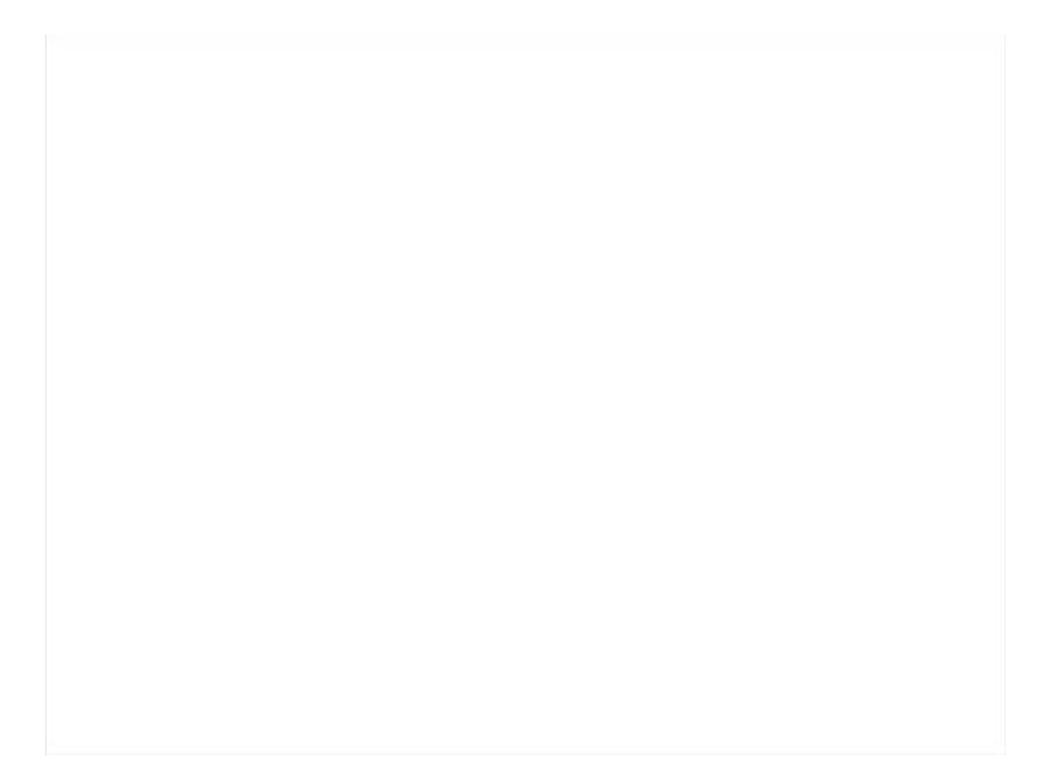
## Nursing the Critically Ill Surgical Patient in the Developing World

British Association of Critical Care Nurses 31<sup>st</sup> Annual Conference, Glasgow

## Scope

- Provide an introduction to the Lancet Commission on Global Safe Surgery
- Provide an overview of nursing the critically ill surgical patient in a Low Middle Income Country



## Critical Care – Is it appropriate?

- ▶ All hospitals have critically ill patients.
- Published peer reviewed reports of critical care units being established in Malawi, Uganda, Democratic Republic of Congo and Zambia units from 1987 onwards.



### Zambia

- Life expectancy is 57 years for males and 60 for females
- ▶ 38 women die every month during pregnancy and childbirth
- ▶ I in 8 children die before they are 5 years old
- > 7,461 nurses and 2,471 midwives on the Ministry of Health payroll



### Access to healthcare

- ▶ 60.5% of the population lives in rural areas
- Often present late stages of costs due:
  - Distance to access to healthcare
  - Pay for treatment
- ▶ Elective versus emergency surgical services
  - E.g. maternal versus women's health



## Ward Based Care

- ▶ Nurse patient ratios as low as I 40 / 60 patients
- No oxygen supply
- Limited monitoring including pulse oximetry





## UTH Admissions 2014

793 admissions218 (27%) trauma247 (31%) post op





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## Critical Care Nursing in Zambia



Ministry of Health

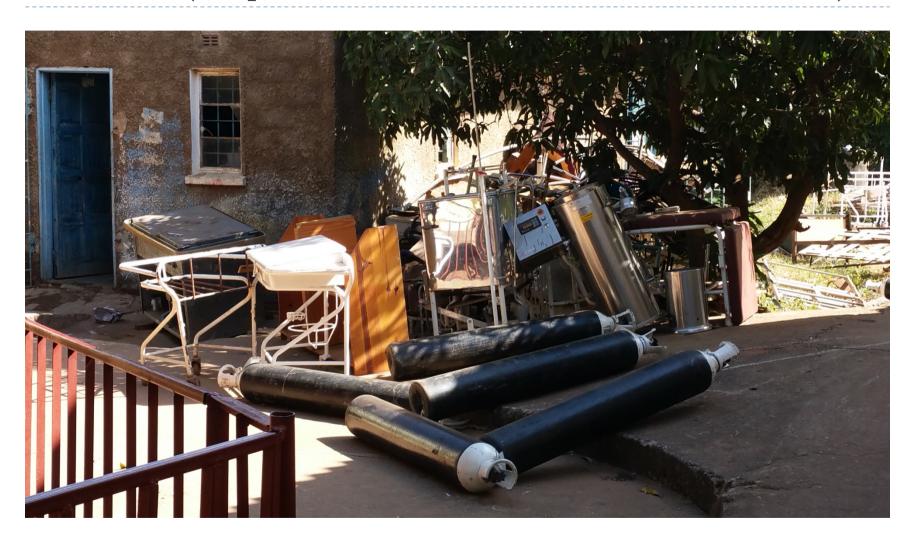
Final Report prepared for Dr Mwaba Permanent Secretary, Ministry of Health, Republic of Zambia



Hospital	UTH - MICU											Levy							Mb	
Hosp Bed State	1800										188								23	
ICU bed state	10											6								3
Types of Pts	Adult / Paeds											Adults / Paeds							Adult /	
No. of staff	42											9								- 5
No. of CCN	15											1								2
	1	2	3	4	5	6	7	8	9	10	Sp	1	2	3	4	5	6	Sp	1	2
Ventilator																				
Monitor																				
Suction																				
Infusion pump																				
Syringe pump												0							0	
O2 Concentator	0																			
Oxygen Supply																				
Defibrillator												AEI	)							
Emer Suc												0								
Portable Pulse Ox												0							0	
Glucometer																				
Portable X-Ray																				
ABG																				
Labs																				
Running Water																				
Electricity																				

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# An estimated 35-50% of medical equipment is out of service (Tropical Health & Education Trust, 2016)



## Improvisation





- ▶ Pain Management
- Sedation
- Enteral feeding
- Wound care
- ► IV access



## Hospital Acquired Infection

- Anti-microbial resistance due to over use of antibiotics
- Lack of running water, soap and disposable hand towels
- No centralised sterilisation services
- Reuse single use items





## Sepsis

Intensive Care Med
DOI 10.1007/s00134-016-4415-3

### WHAT'S NEW IN INTENSIVE CARE

Recommendations for infection management in patients with sepsis and septic shock in resource-limited settings

ICUs.

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of infe

C. Louise Thwaites <sup>1,2\*</sup>, Ganbold Lundeg<sup>3</sup>, Arjen M. Dondorp<sup>4,5</sup> ai expert consensus recommendations group of the European So the Mahidol-Oxford Research Unit (MORU) in Bangkok, Thailang

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#### Introduction

Studies indicate that sepsis and septic shock in resource-limited settings are at least as common as in resource-rich settings. The surviving sepsis campaign (SSC) guidelines have been widely adopted throughout the world, but in resource-limited settings are often unfeasible [1]. The guidelines are based almost exclusively on evidence from resource-rich settings and are not necessarily applicable elsewhere due to differences in etiology and diagnostic or treatment capacity. An international team of physicians with extensive practical experience in resource-limited intensive care units (ICUs) identified key questions concerning the SSC's infection manage-

DOI 10.1007/s00134-015-4070-0

Intensive Care Med (2016) 42:100-103

#### WHAT'S NEW IN INTENSIVE CARE



Ary Serpa Neto Marcus J. Schultz Emir Festic Ventilatory support of patients with sepsis or septic shock in resource-limited settings

Received: 7 August 2015 Accepted: 20 September 2015 Published online: 28 September 2015 © Springer-Verlag Berlin Heidelberg and ESICM 2015

Group members of the 'Sepsis in Resource-limited Settings' group

Introduction

Research evidence for ventilatory support recommendations in sepsis and septic shock management has been mainly gathered from investigations in resource-

ings. Often, it is not practical to directly this evidence to resource-limited settings. resource-limited intensive care units (ICUs) ently restricted in the availability of equip-boratory support and skilled staff. We report of pragmatic recommendations for ventilatory in sepsis and septic shock management in limited settings, built upon two previous sets lines for sepsis management, the most recent

Baelani et al. Critical Care 2011, 15:R10 http://ccforum.com/content/15/1/R10



**Open Access** 

RESEARCH

Availability of critical care resources to treat patients with severe sepsis or septic shock in Africa: a self-reported, continent-wide survey of anaesthesia providers

Inipavudu Baelani<sup>11</sup>, Stefan Jochberger<sup>2†</sup>, Thomas Laimer<sup>3</sup>, Dave Otieno<sup>4</sup>, Jane Kabutu<sup>5</sup>, Iain Wilson<sup>6</sup>, Tim Baker<sup>7</sup>, Martin W Dünser<sup>8\*</sup>

#### Abstract

Introduction: It is unknown whether resources necessary to implement the Surviving Sepsis Campaign guidelines and sepsis bundles are available in Africa. This self-reported, continent-wide survey compared the availability of these resources between African and high-income countries, and between two African regions (Sub-Sahara Africa vs. South Africa, Mauritius and the Northern African countries).

**Methods:** The study was conducted as an anonymous questionnaire-based, cross-sectional survey among anaesthesia providers attending a transcontinental congress. Based on the respondents' country of practice, returned questionnaires were grouped into African and high-income countries. The questionnaire contained 74 items and evaluated all material resources required to implement the most recent Surviving Sepsis Campaign guidelines. Group comparisons were performed with the Chi², Fisher's Exact or Mann Whitney *U* test, as appropriate.

**Results:** The overall response rate was 74.3% (318/428). Three-hundred-seven questionnaires were analysed (African countries, n = 263, high-income countries, n = 44). Respondents from African basisles were less likely to have an  $(3.00 \pm 0.00 \pm 0.0$ 

## Summary

- Insight into critical care and surgical care in the developing world.
- Critical care services will continue to evolve in response to patient need, resource available and global agendas.
- Whilst surgical and anaesthetic programmes have attracted significant funding, perhaps it is time to widen the scope and support other areas of the surgical patient pathway and highlight the important role of nurses.

### Still to come...

- BACCN Conference
  - Critical Care Teaching Resources for the Developing World
  - ▶ 20 Sep 16
- Royal College of Nursing, Defence Nursing Forum Workshop
  - Advances in Trauma and Surgical Care in Resource Limited Environments
  - > 7 Nov 16
  - £48

