critical care in low income setting

Tanzania’s Experience

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Tanzania

• One of the 5 Countries making up the East African Community others being, Kenya, Uganda, Rwanda and Burundi

• Tanzania's population of 44.9 million is highly diverse, composed of numerous ethnic, linguistic, and religious groups

• At 947,303 square kilometres (365,756 sq mi) it's the 13th largest Country in Africa and 31st in the World
• Whereas Sweden has 2400 specialist Anaesthesiologists, Tanzania has only 13.(22)
• Most intensive care is carried out by nurses, or by partially trained Anaesthetic Officers.
• The knowledge and skills of these staff were largely gained during their initial vocational training and in other cases through various exchange programs

• The importance of good quality anaesthesia and intensive care is increasingly understood.

• Reducing mortality in low income countries requires good quality healthcare and intensive care have a vital role in many aspects of hospital services.
• Without good and quality intensive care,
  – maternal mortality following obstetric complications will not be reduced,
  – neonatal deaths from asphyxia and sepsis will continue,
  – case fatality rates from cerebral malaria, severe pneumonia and severe diarrhoea will stay high
  – deaths due to traffic accidents will remain common.
– Patients with acute, life-threatening conditions can often be saved with good quality intensive care.

– Without it they die.
Health Structure

• Home
• Dispensary 600
• Health Centre 300
• District Hospital 120
• Regional Referral Hospital 25
• Zonal Hospitals 3
• National Hospitals 1(+4)
ICU

• All hospitals have a ‘critical care unit’
• Modern ICUs are few and sparsely distributed
• Majority in Major Cities
• Very few with appropriate equipment
• Very few with appropriately trained staff
• All have basic Radiological services:
  – X rays,
  – very few with CT Scans/MRI
Monitoring

• ECG, SpO$_2$, Temperature, and Blood Pressure are routinely monitored, tough
• Majority offer non invasive monitoring capacity
• Very Few offer invasive monitoring services
• Mechanical Ventilation is available in some facilities with Anaesthesiologists/Intensivists (the existence of certain equipment in a hospital does not mean it is in working order or in the correct place, used for correct patients and at correct time)
• All have basic laboratory services with capacity to measure:
  – Full Blood Count and Haemoglobin
  – Clinical Chemistry
  – Parasitology
  – Some,
    • Blood Gases
    • Microbiology
    • Hormonal assays
• Few with Physiotherapy services
• None with respiratory therapists
• Intesivists 22 Anaesthesiologists are the only ones offering services in a few select institutions to a population of 45 Million
• GPs and Other Specialists offer coverage to the
Why is the Quality so poor

- Hasn’t been prioritised politically or medically
- There are few intensive care specialists
- Belief that Critical Care requires sophisticated or expensive equipment
- Some times fatalism among staff with low morale is common and self fulfilling
- The almost complete lack of guidelines implies that standardized and evidence based care is not being followed
• Improving the service could lead to decreasing mortalities, challenging fatalism in the process

• Vertical programs, while successfully at tackling diseases, have been less successful at strengthening health systems (WHO: systems thinking for health systems strengthening, 2009)

• Improving care for very sick patients is urgently required as it has the potential of reducing preventable mortality
Way Forward

• Health agenda to explicitly include need to address the critical care need

• Deliberate effort at Capacity building in Critical Care:
  – Nurses
  – Physiotherapists
  – Intensivists

• Basic Minimum Equipment Standards for equipment
• Set up units to provide basic critical care services with equipment close to patients who need them most

• Early and timely recognition of the very sick patients

• Focus on institution of simple intervention measures
Thank you so much
Asante sana
감사합니다