Paediatric Surgery across Sub-Saharan Africa: a Multi-Centre Prospective Cohort Study


BACKGROUND

The Lancet Commission on Global Surgery

5 billion people
Lack access to surgical care

- 1/3 of the worlds unmet need for surgery is in sub-Saharan Africa (SSA) where up to 50% of the population are children.¹
- Up to 94% of children in SSA lack access to safe, affordable surgery.²
- 2.6 million babies are born with congenital anomalies in SSA/ year.²
- There is limited research on neonatal and paediatric surgery in SSA, particularly large population prospective studies.³
- In 2015, the World Health Assembly stated surgery must be included in ‘Universal Health Coverage’.⁴
- Surgical care is set to increase exponentially in low- and middle-income countries over the next 15-years.
- Children MUST be recognised in these plans.

OBJECTIVE

To form a collaboration of surgeons and allied health professionals to collectively undertake the largest prospective cohort study of paediatric surgery across sub-Saharan Africa.

MATERIALS AND METHODS

Data collection:
- 5 conditions (Figure 1)
- By surgeons & allied health professionals across SSA
- Estimated population: 3000 patients from 100 institutions
- Using the online database:

All collaborators will be co-authors on international presentations and publications

Primary outcome: in-hospital mortality
Secondary outcomes: post-intervention complications
Data to be collected: institutional facilities
patient demographics
time to presentation
peri-operative resuscitation
intervention and outcome

Data Analysis:
- Chi-squared analysis will be used to compare morbidity and mortality outcomes in SSA with published benchmark data from high-income countries.
- Multi-level multivariate logistic regression analysis will be used to identify interventions associated with improved outcomes.
- P<0.05 will be deemed significant.

Ethics:
- Full ethics approval for the project has been granted by Kings College London. Collaborating institutions in SSA will require local ethics approval to participate.

OUTCOMES

1. The largest prospective cohort study of paediatric surgery across SSA to help advocate for enhanced children’s surgical services.
2. Identification of context appropriate interventions to improve outcome.
3. Enhanced research capacity amongst surgeons and allied health professionals in SSA.

CONTACT

paedsurg.research@gmail.com

Naomi Wright, Royal College of Surgeons Research Fellow
Kings Centre for Global Health, London, UK.

References:
4) World Health Assembly, 68/1. Strengthening emergency & essential surgical care and anaesthesia as a component of universal health coverage.

Figure 1: The five conditions to be studied include:
(A) gastrochisis, (B) anorectal malformation, (C) appendicitis, (D) intussusception, (E) inguinal hernia