21–26). For instance, Rwanda, Uganda, Liberia, and Ethiopia each have fewer than one physician surgical provider per 100,000 people. Anaesthesiologists are even less common. The per-capita anaesthesia provider ratio in many LMICs is 100 times lower than that in high-income countries.

Generation of political priority for global surgery: a qualitative policy analysis

Yusra Ribhi Shawar, Jeremy Shiffman, David A Spiegel

www.thelancet.com/lancetgh Vol 3 August 2015
Flashpoint 6: EmOC anesthesia safety in LMIC

- Cross section survey referral hospitals ECSA region:
  - Uganda, Kenya, Tanzania, Rwanda, Burundi

- Survey derived from WFSA international safe anesthesia guidelines/checklist
  - Anesthetists in facilities, MoH and National Anesthesia Society key informants interview

- 0% of facilities had all necessary requirements
  - Eg monitor availability limited, often nonfunctional
  - ICU care gaps
  - Protocol gaps

- 7% had adequate anesthesia staffing
  - 237/143 million population
  - WF density of 0.02-0.13/100,000 population

Lancet commission goal: minimum 20 SAO HCW/100,000 population by 2030

Anesth Analg 2017
Flashpoint 6: EmOC anesthesia capacity and systems

• Task shifting EmOC anesthesia to medical officers worked well in a team-work, facility-based training environment in rural India
  – IJGO 2009

• Optimized procurement, financing and clinical management protocols crucial to minimize anesthesia-related EmOC morbidity and mortality
  – Best Pract Res Clin Obstet Gynaecol 2010

• Anesthesia Safety
  – Spinal anesthesia (6.7% complications)
    • Rate of spinal failure associated with low levels clinical experience
  – General anesthesia (34.5% complications)
  – Conversion to general anesthesia, cardiorespiratory arrest management, intensive care capacity (maternal and neonatal), illustrate need for safety standards and protocols for regional/spinal and general anesthesia

• Anesthesia also affects the “second patient”
• Tanzania – profile 50 Cesarean deliveries using new profile of 40 quality indicators
  • 28 structural indicators (75% present in OT)
    – Essential drugs, anesthesia equipment, oxygen supply
  • 12 process indicators (55% performed in OT)
    – Airway status, blood pressure, intravenous line
• Association of low implementation of and gaps in systematic processes with neonatal morbidity and mortality
• Infants:
  – 7 ventilator therapy
  – 4 stillborn
  – Trop Med Int Health 2015