Essential Training in Operative Obstetrics

American College of Obstetricians and Gynecologists
Association of Obstetricians and Gynaecologists of Uganda
March 2019
The American College of Obstetricians and Gynecologists

Founded in 1951

The specialty's premier professional membership organization in the US

More than 58,000 members

Fellows of ACOG are board certified ob-gyns who practice obstetrics and gynecology and have attained the highest ethical standards

ACOG’s mission is to promote access for all women to high quality safe health care, professionalism of members, scholarship in medical science and advocacy for women in the US and globally

www.acog.org
The Association of Obstetricians and Gynaecologists of Uganda

Founded in 1985

Mandate to promote professionalism, undertake research, represent its members at local, regional, international level and champion Sexual Reproductive Health & Rights of the people in the region

188 members and 43 associate members distributed country wide and working in various positions and areas of health care delivery

Member of Uganda Medical Association, the East Central and Southern African Obstetrics and Gynecological Societies (ECSAOGS), African Federation of Obstetrician and Gynecologists (AFOG) and International Federation of Gynaecology and Obstetrics (FIGO).

http://aogu.or.ug/
Compelling Indicators

Population growth in Africa
• Fastest growth rate in the world
• By 2030, estimated 1.7 billion people

Maternal Mortality Rates
• 2/3 of maternal deaths in 2015 occurred in Sub-Saharan Africa
• Estimated MMR 546/100,000 births
  • Double the global average
By 2035, the world will be short 12.9 million health care workers.

In Africa, there is currently scarce specialist coverage for cesarean delivery (0.7 per 100,000 population)
Maintaining maternal survival momentum will not be sufficient
Skilled birth attendant (SBA) trends to 2020 -- 24 high burden countries
• Coverage – skilled birth attendance or health facility birth – does not necessarily equal effective coverage

• Success is multifactorial – from health system (e.g. SBA, fertility, health system strength) and from outside health system (i.e. education, wealth)
SBA and Maternal Mortality Ratio (MMR) in 2015

SBA and MMR, 2015, 25 EPCMD Countries

Estimated SBA by projection from last 2 DHS
Uganda has made great strides

• Saving Mothers Giving Life (2012-2018)
  • 10 districts in Uganda achieved:
    • 44% reduction of institutional Maternal Mortality Ratio
    • 51% increase in cesarean deliveries

• The systems (whole market) approach led to considerable gains.

• As recently reported, Uganda addressed the “Third Delay” systemically to improve facility CEmONC
  (Comprehensive Emergency Obstetric and Newborn Care)
The “Three Delays” Model describes potential factors that may stop women and girls from accessing the care they need:

THIRD DELAY- Receiving quality care

- Inadequately trained medical staff
- Lack of medical supplies
- Inadequate referral systems
“African mothers are at least 50 times more likely to die after cesarean delivery compared with mothers in high income countries”

Bishop et al, The Lancet Vol 7, April 2019, pg e520
Continuation of the progress

• Lancet review: Findings on In-hospital maternal mortality and complications consistent across 22 African countries, including Uganda

• The most common and severe complications were interoperative and postoperative bleeding.

• Cardiovascular complications had the highest post-operative mortality.

• It is possible that lack of access to cesarean delivery increases postoperative bleeding, leading to 70% of all complications and 25% of deaths.

• Anesthesia provision or lack of specialty care is also cited as a major contributor.
Lancet recommendations

• Improving access to surgery might allow patients to present earlier and mitigate against adverse outcomes.
• This must occur in parallel with improving patient safety during cesarean delivery.

• Targeted interventions:
  • Early risk identification
  • Higher level of monitoring
  • Prophylaxis for postpartum hemorrhage
  • Access to blood and non-blood products
  • Novel methods of training non-physician anesthetists
  • Increase the rate of cesarean deliveries (3.5%)
Need for Comprehensive EmONC

• Uganda’s Cesarean Delivery rate is 2.7%; WHO concludes that at “rates below 10%, maternal and neonatal mortality decreased when caesarean section rates increased.”

• A Cesarean can prevent both maternal and perinatal deaths, and can prevent severe maternal health complications including obstetric fistula.

• A study by Harvard University found that lives can be saved by increasing access to Cesareans and that the investment is a cost-effective way to save lives.*

• Increasing access to Caesarean and other comprehensive Emergency Obstetric and Neonatal Care is part of Uganda’s Roadmap to Accelerate Reduction of Maternal and Neonatal Mortality and Morbidity.


EmONC: Emergency Obstetric and Neonatal Care
ACOG Fellows travel to Uganda to provide supportive supervision during the first training

Day 1 – Ugandan faculty are taught how to run the course and practice didactic/interactive lecturing

Day 2-4 – Ugandan faculty lecture and run a simulation stations for the Providers

Supervised Cesarean Delivery

Essential Training in Operative Obstetrics Model
ETOO Small Group Simulation Training
By 2019, we plan to have 200 Faculty Trainers & 490 Trained Providers Trained in lifesaving surgical skills
ACOG, AOGU, and University Partners developed Essential Training in Operative Obstetrics

Drexel University (US), Makerere, Mbarara University of Science and Technology and Busitema Universities (Uganda)

• To date, 200 Faculty Trainers and over 490 Providers trained

• Integrating a locally-revised curriculum into medical intern training

• Expanded upon a successful surgical obstetrics training program reintroduced in Uganda in 2015
Kampala, Uganda, Surgical Skills and Operative Obstetrics Training
Knowledge improvement: Pre/post test scores

Pre/Post Test Scores

Passing score: 16
ETOO Curriculum

- Surgical Principles & Sepsis Prevention
- Knot Tying
- Handwashing
- Normal & Abnormal Labor Scenarios
- Partogram
- Operative Vaginal Delivery - Vacuum Delivery
- Episiotomy & Perineal lacerations
- Postpartum hemorrhage - Retained placenta, Cervical laceration, Estimated blood loss
- Shoulder Dystocia

- Early pregnancy loss – MVA, 1st Trimester Bleeding
- Laparotomy
- Ectopic Pregnancy
- Neonatal Resuscitation
- Cesarean delivery & Cesarean Hysterectomy training
- Iatrogenic injuries - fistula prevention, Bladder injury repair
- Team Training and Leadership
Curriculum Sources

• Lectures & simulations compiled from:

- Association of Professors of Gynecology and Obstetrics (APGO)
- ACOG: The American College of Obstetricians and Gynecologists
- GLOWM: The Global Library of Women’s Medicine
- CREOG: Council on Resident Education in Obstetrics and Gynecology
- CASE Network
ETOO Training Method (Blended Learning)

- Pre-class e-modules using Moodle
- Pre-class knot tying
- Pre test competency before simulation lab
- Proficiency based progression
- More hands on topics and practice opportunities
- Post test
- Observed surgical procedures
- Network
ETOO Training at Mulago, Mbarara and Busitema