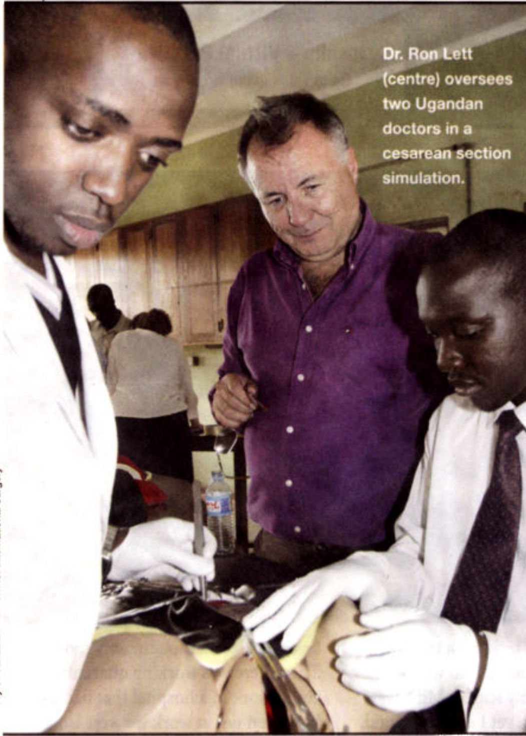

Dr. Ron Lett (centre) oversees two Ugandan doctors in a cesarean section simulation.

Courtesy of Canadian Network for International Surgery

Delivering improved obstetric care in Uganda

In a country with one doctor per 100,000 people, Canadian MDs help train physicians in best practices and how to face limitations

by Wendy Glauser

"HERE WE HAVE a 20-year-old woman. She's just had her first baby. The placenta was delivered within 15 minutes. But then, 15 minutes later, we're called by the midwife: There's blood gushing from the patient's vulva and she's worried."

As obstetrical surgeon Dr. Annette Nakimuli speaks, her four students, all Ugandan doctors in their first year of their obstetrical residency, size up the patient lying on the wooden desk in front of them. She has no arms, no head and only a few inches of thigh, which are spread to reveal a rubber, snap-on vagina.

After running through the potential causes for the post-partum hemorrhage, the group settles on a diagnosis (a cervical tear) and resident Dr. Charles Barlung picks up a pair of silver retractors to widen the vaginal opening for surgery.

"Ow, Doctor! Ow! Ow! Ow! Too much pain!" screams Dr. Ellen Giesbrecht, the head of obstetrics at Women's Hospital in Vancouver, who has ducked down so her maroon-framed glasses and auburn curls are level with the plastic torso.

"You see, you have to be gentle," warns Dr. Nakimuli, over the residents' laughter. "Many times you'll find the most discomfort comes from the retractors, not from the actual stitching."

In the second day of a two-week-long workshop organized by the Canadian Network for International Surgery (CNIS), new doctors are practising three of the more complicated procedures they'll have to perform during their careers: repairing a cervical tear, removing a retained placenta and delivering a baby using the vacuum extraction procedure. Tomorrow, they'll practise cesarean sections with another set of models. And next week, under the watch of Ugandan and Canadian instructors, they'll perform cesareans in the operating theatre.

The Ugandan doctors in the workshop each have done about 100 cesareans already, only months into their residencies—in most cases, without supervision. The training gives them the opportunity to correct bad habits, learn stitching techniques and talk through issues such as informed consent. "Doctors in Africa have huge responsibilities. They're doing 10 cesareans a day," explains CNIS president Dr. Ronald Lett. "We want to make sure they're prepared."

Dr. Lett, an Alberta-born surgeon, founded CNIS in 1995 after working in several African countries and noticing that while young doctors "have a great deal of knowledge, they lack skill"—knots are improperly secured, instruments aren't correctly used and aseptic considerations don't receive priority. A major reason for this is that in a country with eight physicians per 100,000 people, surgeons are thrown into the operating theatre head-first.

Limited resources

CNIS now holds surgical skills workshops in seven African countries, both for surgeons and for general practitioners, who often end up performing emergency surgeries. "We teach GPs some basic surgeries, like how to open an abdomen, remove the pathology and do a colostomy," Dr. Lett says, "because if you're in rural Cameroon or Ethiopia, you can't afford the time to wait for a surgeon."

Half of CNIS's workshops are focused on obstetrics, however, as ob/gyn wards tend to be the most overstretched in public hospitals throughout the region. Ugandan women have seven children on average, and in the East African region, one in 13 women will die from childbirth. The "unlucky 13" phenomenon, as Dr. Lett terms it, has to do with many factors, the most obvious of which is a lack of personnel. In the labour ward at Mulago, Uganda's top referral hospital, the ratio of pregnant women to midwives is 10 to one. "You walk through the labour ward and women are labouring on the floor and you're trying not to step on the amniotic fluid," says Dr. Jan Christilaw, one of four Canadian doctors who joined Dr. Lett for the workshop.

The available facilities and equipment are also horribly inadequate. Mulago Hospital has three obstetrical operating theatres running during the day and one at night for a patient load of 30,000 deliveries a year (most of which are high-risk cases, given Mulago's role as a referral hospital). To put that in perspective, BC Women's, with two 24-hour theatres and a third OR running during the day, hosts 7,000 deliveries a year.

The dearth of resources is so acute that surgeries at Mulago are frequently delayed due to a lack of clean linens or sutures, or because a machine has broken down.

Given this environment, CNIS teaches doctors how to prioritize and make do. "We teach the ideal way that things should be done and we never want doctors to lose sight of that ideal, but we also say, 'These are the limitations you'll face on the job, so you may find you have to do it this way,'" Dr. Christilaw says.

A Ugandan doctor may have 10 patients awaiting cesareans and only four doses of government-provided antibiotics in stock, for example, she explains. "So, we say, 'Here's how you select the patients you give the antibiotics to, or here's how you decide which case of obstructed labour to start with.'"

Working alongside Ugandan obstetrical consultants—the most highly trained doctors—CNIS tries to instill in young doctors a respect for process in working environments that can often be chaotic. During one of the sessions in the classroom aspect of the workshop, residents are taken through a mock example of a labour and asked to fill out a partogram, a tool which is used about 10% of the time by Ugandan doctors. "A partogram makes it less likely that a pregnant woman who's been labouring for 12 hours is pushed off to the side and forgotten about when a new shift starts, which happens here," Dr. Christilaw says.

With 20 residents going through the workshop at once, the doctors trained there can collectively have an impact on how things are done. "Filling out partograms just wasn't part of our routine, but I work on the same ward as two other people here, so I think we can push the midwives to start filling these out," says resident Dr. Jane Namugga.

At the end of the training, as the Canadian and Ugandan doctors sit down at an upscale Chinese restaurant, everyone is smiling: The week at the theatre went by without any maternal deaths. And once the dishes of hot and sour soup, chicken and cashews, and tilapia have been passed around, it's a victory worthy of an after-dinner speech.

"When your house is burning, you're so thankful for anyone who comes with a bucket of water," says Dr. Miriam Nakalembe, a clinical lecturer in ob/gyn at Makerere University in Kampala. "But, next time you come, I hope you get to see more of the country—you should come just for a vacation."

To Dr. Christilaw, however, coming to Uganda merely to safari and swim is out of the question. "We know how hard you're working, and we know how much you're struggling," she says, looking down the table to her colleagues in tailored suits and shiny print African dresses. "It would be pretty difficult for us to come here and lay on the beach."

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