SIERRA LEONE

USAID FROM THE AMERICAN PEOPLE

FistulaCare

Integrating Fistula Treatment and Prevention: The Launch of a Maternity Unit in Sierra Leone

WHAT IS FISTULA?
Obstetric fistula is a childbirth injury, usually occurring when a woman is in labor too long or when delivery is obstructed, and she has no access to a cesarean section. She endures internal injuries that leave her incontinent, trickling urine and sometimes feces through her vagina.

Fistula Care works to prevent fistula from occurring, treats and cares for women with fistula, and assists in their rehabilitation and reintegration. For more information about fistula and the Fistula Care project, visit www.fistulacare.org.

www.fistulacare.org

Introduction

The Aberdeen Women's Centre was built to continue providing obstetric fistula repairs in Freetown, Sierra Leone, following the departure of a Mercy Ships hospital ship in 2004. First known as the Aberdeen West Africa Fistula Centre and operated by Mercy Ships, the private center is now known as the Aberdeen Women's Centre (AWC) and is managed by the Gloag Foundation. AWC receives financial support from the Gloag Foundation and others, including the U.S. Agency for International Development (USAID), through EngenderHealth's Fistula Care project.

In 2005, AWC built an outpatient clinic to offer consultations and vaccinations to children under age 12. From 2007 to 2010, AWC performed an average of 260 fistula repairs and served more than 7,000 children each year. Services to prevent obstetric fistula have grown to include counseling, family planning, and, starting in April 2010, a maternity care unit for pregnancy care, labor and delivery, and postpartum recovery.

Sierra Leone remains one of the world's most dangerous places in which to bear children, with an estimated 1,033 maternal deaths per 100,000 live births (Hogan et al., 2010). About 42% of births are assisted by a skilled birth attendant[1] (SSL & ICF Macro, 2009)—35% of rural births and 76% of urban births (WHO, [no date]).

The Launch of the Maternity Unit

Obstetric fistula treatment services vary significantly worldwide, from private, dedicated repair centers to large public-sector hospitals in which fistula repair is one of many services offered. AWC began as a facility uniquely dedicated to surgery for traumatic and obstetric fistula, transforming the lives of women who had received inadequate obstetric care and were left incontinent. AWC's focus on fistula treatment remained constant until one of its staff went to deliver her baby at a government hospital and died during childbirth. In the wake of this loss, AWC's leaders began to consider expanding their focus.

Over several years, AWC developed a vision encompassing fistula prevention as well as treatment. AWC began to offer family planning counseling and methods to fistula patients in October 2010, to help women avoid reinjury and achieve a successful pregnancy, if desired. Also, AWC saw an opportunity to offer quality maternal care, thereby preventing the occurrence of new fistula cases and reducing maternal mortality.

Initial Needs

Numerous preparations were required before the AWC's maternity unit could open its doors. These included:

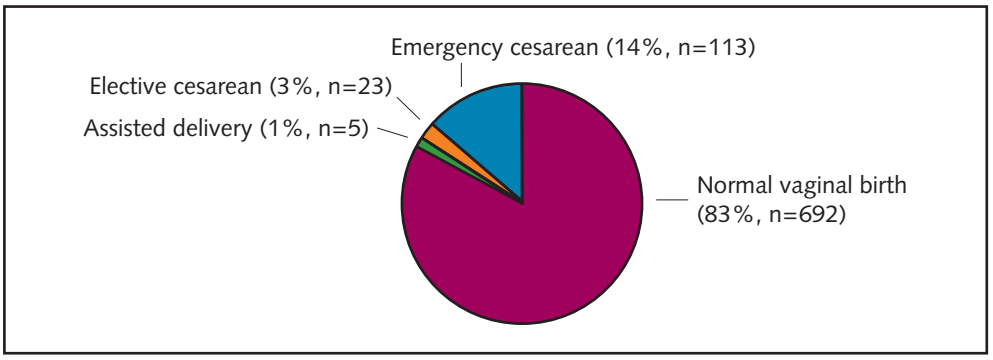
- *Staffing.* AWC hired 10 certified nurse-midwives who had each attended at least 15 births. Five had recently completed their training, while five others were qualified but were not practicing as midwives. AWC sought inexperienced midwives who would learn good practices from the start. Recruitment interviews focused on the candidates' attitudes, communication skills, and enthusiasm, on the principle that it is easier to teach skills than to change attitudes. The junior midwives are mentored by expert midwives who are international volunteers posted to AWC

[1] Defined as a doctor, nurse, midwife, or maternal and child health aide.

for various lengths of time, ranging from six weeks to two years. Retired obstetricians also volunteered to help prepare the operating theater. Following their departure, AWC established relationships with three local obstetricians, who are on call to perform cesarean sections, as required; AWC continues to use experienced international obstetricians to mentor staff.

- *Staff development.* As it was critical that the midwives share a baseline clinical competence, AWC held two weeks of intensive staff development, via classroom discussions and lectures, before opening the maternity unit. This ensured that the midwives shared a knowledge and understanding of expectations and standards. AWC does not tolerate any disrespect toward or abuse of patients by its staff.
- *Theater and equipment.* AWC's operating theater was customarily used to serve only fistula patients, meaning that all surgeries were elective. In contrast, the maternity service required a theater prepared to handle emergency services 24 hours a day. This had implications for the theater's staffing and prompted the development of specific policies for obstetric surgery. An underutilized hostel at AWC was refurbished to accommodate the maternity unit (of eight beds and three delivery beds).
- *Policies, guidelines, and record keeping.* The maternity unit's early months would decide its acceptance in the community, so AWC committed itself to evidence-based practices and quality services from the start. Establishing expectations and clear procedures for routine care and emergencies was of utmost importance. AWC provided each midwife with a binder for training materials and technical reminders. Guidelines and policies for obstetric emergencies were developed using guidance from the National Institute for Health and Clinical Excellence, the World Health Organization, the Perinatal Education Programme, Advanced Obstetric Life Support, and Neonatal Life Support. AWC developed registers, physical files, and an electronic record-keeping system. At the end of each month, information is summarized in the registers on the number of births (vaginal, assisted, emergency, and elective cesareans), episiotomies, cases of perineal trauma, twins, stillbirths or neonatal deaths, instances of postpartum hemorrhage, and third- or fourth-degree tears. This information is checked against the reports produced from the electronic database.
- *Publicity.* The AWC maternity unit formally opened at a launch attended by Her Excellency Sia Koroma, the first lady of Sierra Leone, and by Ann Gloag, founder and chief executive of the Gloag Foundation. Beyond the publicity surrounding the launch, AWC has not done any formal advertising of its services: Information has spread by word of mouth and through AWC's networking with other health professionals and institutions.

Figure 1. Percentage distribution of births at Aberdeen Women's Centre, May 2010–May 2011, by type of birth (n=833)



Maternity Services Offered

AWC offers antenatal care (after 20 weeks), intrapartum care (normal deliveries, assisted deliveries, and elective and emergency cesarean section), and postnatal care. The length of stay varies from six hours (uncomplicated vaginal birth) to 3–4 days (for a cesarean delivery), or longer, if warranted, for high-risk patients. Prior to discharge, women are counseled on newborn care and family planning. They return seven days later for newborn immunizations. AWC requires patients to register in advance, but any woman who arrives at AWC in an emergency receives care.

Ongoing Training

AWC is committed to practical, on-the-job training, giving positive feedback while maintaining clear and high expectations. In the words of one midwife, "They do teach us; they don't cry you down." Through ongoing mentoring and training, AWC emphasizes the use of the partograph for labor monitoring, the facilitation of normal vaginal deliveries when appropriate, timely response to emergencies, postoperative care after cesarean delivery, and resuscitation of the newborn. AWC strives to create an environment conducive to learning, with supervisors serving as mentors or preceptors, asking questions such as "Why are you doing that?" "What are you hoping to find?" "What decision will you make with your findings?" "Is there anything that you're worried about?" The goal of this ongoing supervision is to teach clinical judgment to junior midwives, ensuring that they know how to identify deviations from the norm and deal with emergencies. Although midwives at AWC are paid less than their counterparts in the public sector, it is a competitive salary, and they receive benefits such as medical insurance, outpatient services for their children, and meals when they work. Staff interviews indicated that they accept this policy because they appreciate the work environment, ongoing education, and camaraderie and shared staff lunches.

Results

The AWC maternity unit opened in April 2010 and began offering delivery services in May 2010. In the first year of maternity services, AWC attended 833 births, of which 692 (83%) were normal vaginal births, five (0.1%) were assisted, and 136 (about 17%) were by cesarean section, including planned cesareans for 23 women who had previously had a fistula repair (Figure 1). Of 23 breech births, 21 were delivered vaginally. Ten percent of patients had episiotomies.

AWC witnessed 46 perinatal deaths (5.6%) and just one maternal death in its first year of offering services. Given the national maternal mortality ratio of 857–1,033 deaths per 100,000 live births (SSL & ICF Macro, 2009; Hogan et al., 2010) and AWC's caseload, one might have expected that seven or eight mothers would have lost their lives.

Keys to Success

AWC staff cite several factors that have helped them to successfully introduce maternity services, including:

- *Leadership and modeling.* AWC's leaders have led by example and encouraged a sense of teamwork among staff. Roles and responsibilities were well-defined, and the clear line of command facilitated even difficult clinical decision making. AWC's expert midwives want to show, not just tell, how things are done, providing junior midwives with role models for excellent, safe, and competent midwifery practice.
- *Resources.* AWC is fortunate to have the resources it needs, enabling it to ensure adequate staffing, space, equipment, supplies, and drugs. This is motivating for staff; one commented that "other places have to recycle gloves, but here we can use gloves whenever we need." Services cost approximately $514 per delivery patient. AWC benefits from donations of some supplies and international volunteers' time; beyond this, the Gloag Foundation is committed to covering ongoing expenses.
- *Commitment to evidence-based practice.* AWC strives to ensure that its services conform to evidence-based practice for quality care. A midwife education specialist designed initial training materials, and all staff participate in ongoing on-the-job, in-house training. AWC holds clinical governance meetings as appropriate, to provide opportunities to discuss and debate challenging cases. All midwives are held to high standards, with great value placed on attentive, competent patient care. One midwife neatly summarized this orientation to ongoing education: "You learn until you're dead."
- *Partnership.* Relationships with surrounding facilities have helped to ensure that donated blood is available to AWC patients in need. A nearby facility supported AWC to offer family planning counseling and commodities, allowing AWC to further prevent new cases of fistula. AWC encourages staff from surrounding facilities to participate in its obstetric emergency study days for ongoing professional development, which deepens goodwill.

Challenges

AWC has faced numerous challenges in the start-up of its maternity service.

Logistical challenges have primarily related to scheduling. Not all clients respect appointments or comply with prescribed antenatal medication. Because large numbers of walk-in clients proved burdensome, AWC now requires booking, limiting new clients to 30 each week, so that the service will not be overwhelmed. Initially, new and returning clients arrived at the same time, but to improve organization, AWC set aside separate days for new registrations and for returning clients. This separation has helped, but unregistered emergency cases still arrive and receive care. International procurement of drugs and equipment has also proven difficult at times.

There are significant *clinical challenges* in serving the Freetown population. No facility in Sierra Leone can ventilate neonates; only limited ventilation services are available for adults. Moreover, ambulance services and portable oxygen are not available. This means that in some cases, there is only so much that AWC can do. The number of compromised and premature neonates has been high, perhaps because of maternal complications such as anemia, malnutrition, eclampsia, and pregnancy-induced hypertension; such conditions can lead to poor placental function, which adversely affects intrauterine growth and development. AWC midwives can testify to challenging and near-death cases; overcoming such clinical challenges builds the sense of teamwork among staff.

Finally, AWC has faced several challenges related to its ***philosophy of care***. At the outset, AWC did not have an explicit philosophy guiding patient care decisions, particularly in relation to appropriate indications for cesarean delivery. This created tension with visiting international obstetricians and with local obstetricians who made clinical decisions that AWC midwifery leaders questioned. Ultimately, AWC clarified that its primary mandate is "to save mothers." To lose a mother is to lose an essential member of a family and community. AWC carries out cesarean deliveries for maternal indications, focusing on what is best for the mother not only for her present pregnancy, but also for her safety in subsequent pregnancies. Adherence to robust protocols has been a way of encouraging consistency in decision making. An overseas consultant has volunteered to provide guidance remotely whenever needed.

AWC's clinical leaders recognize that increased internal communication before and during the launch of the maternity unit would have helped to ensure a shared, clear understanding of the planned implementation and policies from the inception. Staff turnover between development and implementation was

A healthy mother and newborn at the Aberdeen Women's Centre maternity unit

SIERRA LEONE

SIERRA LEONE

Situated on Africa's west coast, Sierra Leone is rebuilding following a protracted civil war that ended in 2002. Nearly three-quarters of women in Sierra Leone gave birth at home in 2008; 42% were assisted by a skilled professional such as a doctor, nurse, or midwife (SSL & ICF Macro, 2009). Nationwide, just 2% of births are by cesarean section, which suggests that not all women in need of a cesarean are able to receive one. In April 2010, the Sierra Leone government eliminated user fees for pregnant and lactating women at all public-sector facilities, rolling out a policy that made facility delivery and cesarean deliveries free of charge at all government facilities.

Fistula Care at EngenderHealth
440 Ninth Avenue, 13th Floor
New York, NY 10001
Tel: 212-561-8000

www.fistulacare.org

EngenderHealth
for a better life

challenging. Furthermore, the initiation of the maternity unit transformed AWC from a calm haven of healing to a bustling center where laboring women arrive at any hour and the operating theater must always be at the ready. The staff focused on fistula treatment have nevertheless been very supportive.

Recommendations for Replication

AWC encourages other dedicated fistula repair centers to consider expanding their vision to encompass fistula prevention as well as treatment. They recommend the following:

Staffing

- Determine the most appropriate staffing. Relying on one or two expert midwives is not sustainable; centers delivering up to 100 babies per month should plan to engage four skilled providers (either four midwives or three midwives and one obstetrician-gynecologist). Staff recruited need to be highly skilled and up to date on clinical practice.
- Include an obstetrician on the team from the start, since the development of protocols requires a robust, experienced team.
- Expect each tier of staff to perform a range of functions on an effective team. For example, nursing assistants rather than nurse-midwives could help wash babies and make beds.

Planning

- Have a team of strategic, key people (including technology support, logistics, clinicians, theater staff, and administrators) anticipate issues as much as possible, from day-to-day logistics to dealing with emergencies. International staff should be experienced clinicians with demonstrated knowledge of current best practices.
- Create a multidisciplinary team of theater staff, laboratory technicians, and drivers to be on call 24 hours a day, with support from administration, logistics, and procurement personnel.
- Plan frequent, structured training events for staff.
- If possible, avoid establishing new services during the implementation of a major national policy change affecting maternal health.
- Champion your work with the Ministry of Health (MOH) and actively network with other facilities. Ensure that service delivery guidelines are in line with the national strategic plan. Collaboration with the MOH allows for joint ownership and partnership.

Philosophy of Care

- Develop an explicit philosophy of care to guide clinical decision making.
- Ensure that robust policies and procedures are in place before services begin.
- Insist on thorough documentation. Accountability is critical.
- Create a safe learning environment, with an emphasis on the team's interactive clinical review of cases, policies, and procedures. Value each individual. Ensure that learning outcomes are implemented. Perform continuous review and evaluation.

References

Hogan, M., Foreman, K., Naghavi, M., et al. 2010. Maternal mortality for 181 countries, 1980–2008: A systematic analysis of progress toward Millennium Development Goal 5. *Lancet* 375(9726):1609–1623.

Statistics Sierra Leone (SSL) and ICF Macro. 2009. *Sierra Leone Demographic and Health Survey 2008*. Calverton, Maryland, USA.

World Health Organization (WHO). [No date]. *Republic of Sierra Leone: Country profile*. Geneva. Retrieved from: www.afro.who.int/en/clusters-a-programmes/frh/making-pregnancy-safer/mps-country-profiles.html, January 13, 2011.

Acknowledgments

Carrie Ngongo wrote this brief, in partnership with AWC's Katherine Christie and Jude Holden. Special thanks go to the AWC's dedicated team of staff midwives, Elizabeth Foster, and Ann Gloag. Pamela Harper, Evelyn Landry, Celia Pett, and Dr. Joseph Ruminjo provided valuable input and suggestions. This brief was edited by Michael Klitsch and typeset by Nicole Hirschman.

This publication was made possible by the generous support of the American people through USAID, under the terms of the cooperative agreement GHS-A-00-07-00021-00. The information provided here does not necessarily represent the views or positions of USAID or the U.S. Government.

Photo credits: C. Ngongo/EngenderHealth.