SPECIAL FOCUS

Perspectives From the Field: Who Will Deliver the Babies?

Obstetrics and Disaster Preparedness and Response

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Who will deliver the babies? More precisely, who will manage abnormal labors and deliveries and sick newborns in acute and subacute disaster settings? I deployed to Haiti in February 2010, 1 month after the earthquake, with the New Mexico-1 Disaster Medical Assistance Team, under the auspices of National Disaster Medical System. Our team's mission was to transition the Group for the Study of Kaposi's Sarcoma and Opportunistic Infections (GHESKIO) field hospital from a surgical inpatient facility to an outpatient clinic ready for handoff to a small nongovernmental organization. Before arrival I was unsure how much need there was for an obstetrician/gynecologist; most physicians on NM-1 are emergency medicine specialists and we presumed most care would be acute emergency and walk-in care. I need not have worried. The initial National Disaster Medical System team at the site, an international medical-surgical response team, had arrived 3 days postquake and focused on trauma but also averaged 1 to 2 births per day. A departing surgeon told me that 4 cesarean deliveries were performed during the previous 2 weeks. Adjacent to our tent hospital/clinic was a tent village (tarps and poles, not really tents) of 6000 people, a ready supply of patients. They had no electricity, running water, or floors, only sparse portable toilets, and no civil organization or security. They were hungry and thirsty 1 month after the earthquake.

Ideally, with regard to reproductive health issues, international teams focus on the Minimal Initial Service Package for Reproductive Health in Crisis Situations, which is formulated to deal with sexual violence, neonatal and maternal acute needs, HIV transmission, and longer-term reproductive health planning.[1] The guidelines, however, do not address in detail situations in which essentially all of the national medical referral centers are destroyed. In addition, emergency transport out of Haiti was extremely limited and long transport times are not appropriate for laboring obstetric patients. Before the earthquake, 80% of births occurred at home, but most homes were destroyed and community organization disrupted by the temblor. Many women sought relief facilities rather than give birth on the street or in unsafe, primitive camps with no attendant.

Our team experienced 6 births during 9 days of inpatient activity. All of the births were singleton, spontaneous vaginal in vertex presentation. No prenatal records were available; most patients revealed only minimal prenatal care. All of the babies weighed approximately 5 to 7 lb and did well. We had no scale on which to weigh the babies. One patient had prolonged premature rupture of membranes and low-grade fever; she was induced with oxytocin and given intravenous antibiotics. Another patient required oxytocin augmentation for inadequate contractions. We had no intravenous pumps. One patient hemorrhaged postpartum and required manual extraction of retained placental fragments under procedural sedation. No patients tested positive for syphilis, 2 were positive for HIV.[2] Both were previously aware of their diagnosis, had received some antenatal treatment, and were given appropriate antiretroviral medications peripartum. Breastfeeding options were addressed in detail; 1 patient received free formula from GHESKIO, the other elected to breast feed.[3] We provided tetanus immunoglobulin and the diphtheria, tetanus, and pertussis vaccine when indicated. Babies went "home" to camp or the street with an improvised cardboard box bassinet that was lined with a plastic garbage bag and a baby blanket, plus disposable diapers. We filled out birth certificates, 1 for the mother and 1 "filed." One free appointment was scheduled at GHESKIO for all mothers and babies; cellular telephones were the tentative contact method. Patients received MREs and bottled water from our Disaster Medical Assistance Team supplies while they were admitted. Four of 6 mothers stated that they had no other food or money to buy it and admitted to hunger.

We examined numerous antenatal patients for complaints of preterm labor, cystitis, pyelonephritis, gastroenteritis, and depression. There were several miscarriages; a fetus at 20 to 22 weeks by size was mildly infected and aborted spontaneously. Another woman hemorrhaged and required urgent dilatation and curettage. We did not have misoprostol or manual vacuum aspiration kits. A woman with threatened abortion and viable 16-week-old fetus had a placenta previa by portable ultrasound and responded to bed rest. Three postcesarean delivery patients from preceding weeks returned to GHESKIO with infections, 1 each with wound infection and endomyometritis and a third woman with both, demonstrating the known increased risks of cesarean delivery in austere environments.

We had around-the-clock access to local Haitian interpreters, but situational issues clouded communication. We received vague answers about numbers of previous children and due dates. All of the mothers said

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that this was not a good time to be having a baby, and we worried together about nutrition, hygiene, and immunizations. How many babies would be tough and lucky enough to survive their first year?

Women in Haiti "sing" their labor pains, with a melodic "woo-oo-o" calling to those nearby. Like an insistent siren, they ask their community for help. Our team provided basic emergency obstetric care, and had capability for cesarean birth if needed, yet additional equipment and medication would have been helpful. A few local practitioners were available, but we had no mechanism with which to compensate them. I propose that the international disaster response community consider forming "SWAT teams" consisting of obstetricians/gynecologists, midwives, pediatricians, neonatal nurse-practitioners, and anesthetists, plus appropriate tools and medications, and establishing protocols for using local medical professionals. In addition, nonobstetrician physicians should strive to be fully competent in basic emergency obstetric care if they plan to provide disaster care.[4,5]

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