# Millennium Cities Initiative

EARTH INSTITUTE | COLUMBIA UNIVERSITY

### MILLENNIUM CITY STORY: SUCCESSES IN HEALTH

## Neonatal Survival Training Program Examines Keys to Newborn Survival, Saving Lives Along the Way



Fred Adomako Boateng, one of the "master trainers," supervises medical professionals learning the HBB protocols.



Medical professionals practice resuscitation techniques during one of the trainings.



MCI's West Africa Regional Coordinator Abenaa Akuamoa-Boateng meets with a mother and baby pair.



Yaa Pokuaa and her baby Savior, one of 68 babies successfully resuscitated through this training program.

#### **OVERVIEW**

Responding to sky-high neonatal mortality rates, the Millennium Cities Initiative carried out a neonatal survival training program this past year in Ghana's two largest cities. Based on the American Academy of Pediatrics' (AAP) Helping Babies Breathe, TM (HBB) protocol, the training provided life-saving skills to more than 100 medical professionals who in turn passed on essential information on newborn health and hygiene to participating mothers. MCI is now taking this successful pilot to northern Ethiopia, to be replicated in both the Millennium City and Millennium Villages projects.

#### SITUATION ANALYSIS

Nearly one million babies still die every year due to respiratory complications immediately after birth. Recent research indicates that extremely simple, cost-effective techniques can have a dramatic impact in helping babies breathe, thus reducing neonatal mortality.

The AAP HBB guidelines suggest that within the first minute of life, a baby should be breathing well or resuscitated by warming the infant in a dry blanket, removing mucus from the infant's mouth and nose with an inexpensive bulb syringe and, where indicated, stimulating breathing by rubbing the infant's back. In cases of inadequate respiration, a simple bag and mask can be used to resuscitate newborns. These guidelines, now being rolled out worldwide, have been introduced to two Millennium Cities, thanks to the support of the AAP, Johnson & Johnson and the US-based non-profit AmeriCares, all of whom have committed to examining ways to increase newborn survival.

#### **ACTIONS TAKEN**

Four Ghanaian physicians were taught to be "master trainers" in the HBB protocols and then taught 116 midwives, nurses and other health professionals in Accra, Ghana's capital, and Kumasi, Ghana's second largest city. The program was supported by the Ghana Ministry of Health, Ghana Health Service and the Accra and Kumasi Metropolitan Health Directorates and was carried out at two hospitals, Suntreso Hospital in Kumasi, home to one of two Israeli-built neonatal units, and Ussher Hospital, a centrally located facility in Accra.

Medical practitioners at Suntreso and Ussher were also given information on breastfeeding, infection prevention and recognizing the symptoms of common newborn illnesses, adapted from the NGO Save the Children's manual for pediatric care. The health staff then shared this essential information with more than 1,600 new mothers at Suntreso and Usher, who received AmeriCares to bags filled with newborn essentials from Johnson & Johnson.

The participating mothers and their babies were followed over a six-month period, ensuring that the babies were meeting growth requirements and receiving essential vaccinations, while mothers were given tips on family health, hygiene and nutrition.

#### **RESULTS ACHIEVED**

Out of 2,004 live births at two clinics, 68 newborns were successfully resuscitated – a 3.4 percent increase in the number of babies surviving who might otherwise have died. This pilot program successfully demonstrated that simple techniques can help babies live, proving HBB to be a highly effective model for helping developing countries attain Millennium Development Goal 4, reducing child mortality. MCI is hopeful that lessons learned from this pilot can support the program's scale-up across Ghana. On the basis of this initial success, this year Johnson & Johnson is funding a similar program in the Millennium City of Mekelle, Ethiopia, and the nearby Millennium Villages, to support the Tigray Regional Bureau of Health in its dauntless efforts to improve neonatal survival in one of the poorest regions on the planet.