

Advanced Training and New Protocols Help Save Newborns

“When I am in the delivery room working to save an infant who is in distress, I don’t have time to think about what needs to be done next.

My actions, and the actions of everyone else attending to the birth, must be automatic because every second can mean the difference between life and death, between good health and a lifetime of disability,” says Maya Shengali, chief neonatologist of Kutaisi. For the past seven years, Shengali has worked at Maternity Hospital #2 in this community of nearly 244,000 located in the Imereti Region, a three-hour drive from the Georgian capital of Tbilisi. She has also consulted with patients at the Kutaisi Women’s Wellness Center (WWC), established by AIHA’s Kutaisi/Atlanta partners, since it opened in March 2000.

One of four neonatologists employed by the Maternity Hospital, Shengali is present at all the births that occur when she is on duty. She is also called upon to supervise roughly 60 percent of the more complicated cases, including those in which infants are likely to experience asphyxia or some other type of distress.

“We deliver 70 to 80 infants here each month and, of those, approximately 15 percent are high-risk births. For these deliveries, a team consisting of an obstetrician, a neonatologist, an anesthesiologist, and an experienced pediatric nurse are present,” she states. And the clinicians truly do work as a team, Shengali notes, since she—along with Nino Berdzuli, an ob/gyn at the WWC who also works one day a week at the Maternity Hospital—helped develop and implement new neonatal resuscitation guidelines in the Hospital’s delivery rooms.

“Before these new protocols were instituted in 1999, the resuscitation techniques we used were very crude, very outdated, and often costly because they called for inappropriate use of medications,” Shengali notes, explaining that splashing cold water on the face of an infant who wasn’t breathing was one commonly employed method of resuscitation. “The guidelines we now use are in accordance with modern standards of clinical practice and enable us to work together much more effectively because each member of the team knows exactly what he or she is



PHOTO: BY SUZANNE E. GRINNAN.

Kutaisi neonatologist Maya Shengali tends to one of her tiny patients at Maternity Hospital #2.

supposed to do. In cases when an infant is not breathing or is experiencing some other problem, there is no time to discuss what to do next; everybody must know their responsibilities by heart.”

Noting that she and her colleagues were eager to learn new ways to help newborns survive, Shengali recalls how instructors from the Tbilisi Neonatal Resuscitation Training Center came to Kutaisi to conduct training sessions soon after the new guidelines were instituted. “The training was conducted in such an interesting and practical way, using mannequins to simulate a wide range of complications that can occur during birth. They taught us simple, cost-effective ways of treating infants who are experiencing respiratory distress, asphyxia, and other life-threatening conditions,” she says, explaining that Dr. Berdzuli continued to share the latest information gleaned from the Internet, the Center in Tbilisi, and their partners in Atlanta with her colleagues at the WWC and the Maternity Hospital. The US partners also donated respirators, incubators, masks, and other resuscitation equipment necessary for the protocols to be successful.

“Five years ago, we had never even heard

Training in neonatal resuscitation techniques such as thermal management and suctioning, as well as more specialized skills such as intubation and ventilation, are the foundation of AIHA’s Neonatal Resuscitation Program. The clinicians who participate in these classes—whether at a partnership Neonatal Resuscitation Training Center or at their home institutions—often supplement their knowledge by conducting research that will help them implement newer, more effective guidelines for neonatal care. This is the story of one doctor who collaborated with the information coordinator of the Kutaisi/Atlanta partnership to develop new protocols that have resulted in a marked reduction in neonatal mortality at Maternity Hospital #2; the story of the information coordinator, an ob/gyn herself, appears on the other side.

of some of the equipment we received through our AIHA partnership,” Shengali continues. “Now we know how to operate the machinery and save the lives of many children who never would have survived if they had been born before then.”

The statistics bear out her claim: in 2001, the Maternity Hospital lost only three infants—two who were extremely premature and one who was born with profound brain abnormalities. “I noticed a difference in survival rates almost immediately, definitely within the first six months or so. In the first year, cases of asphyxia declined by nearly 10 percent and, by the second year, the staff was adept and confident in their newly-acquired skills.”

Expressing her happiness and pride at having played a role in the changes that have been made at the Maternity House, Shengali concludes, stating, “We have taken many important steps toward reducing neonatal mortality rates at the Maternity Hospital and, as the mother of two young boys, I can tell you that giving parents the gift of a healthy baby is a very precious thing. It is everything.”

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