

Using Technology to Better Serve the Region:

Tbilisi EMS Training Center Expands its Role

BY KATHRYN UTAN

One look at the effective and engaging Web site created by the staff at the Center for Disaster and Emergency Medicine (CDEM) in Tbilisi, Georgia—formerly the Emergency Medical Services Training Center (EMSTC)—is all it takes to see just how warmly new technologies such as the Internet have been embraced by the now-graduated AIHA partners. The interactive site is replete with top-notch animated graphic and audio components that present high-impact images of armed conflicts and natural disasters that have plagued the nation—just the types of crisis situations that necessitate a finely tuned emergency response network. But all these hi-tech bells and whistles are no mere side show; they are simply an attractive wrapping for the wealth of information about the Center, its accomplishments, and goals for the future that the site provides. Even more important, the site is a valuable conduit that allows healthcare professionals, students and researchers, and anyone else interested in disaster and emergency medicine, to link to a wide range of global information resources.

Another unique technology project currently in its pilot stage at the CDEM is the creation of an electronic patient history and consultation service dubbed TelCoNet (short for Tele-Consultation Network). The service uses software developed by Learning Resource Center (LRC) staff in cooperation with EMS trainers from the CDEM. It enables practition-

ers to “discuss” cases and treatments via the Internet. According to CDEM/EMSTC Director, Dr. Dimitri Makhatadze, the highly interactive structure of TelCoNet features a number of databases—patient medical history, diagnostic systems, medical algorithms (standard clinical pathways for addressing various injuries and ailments)—as well as a strong communication component including user connection support, Internet conferencing, electronic image transfer, audio/video, and direct chat options. The service will allow for increased coverage and accessibility—especially to remote areas of the country—and will help save time, money, human resources, and, most importantly, reduce morbidity and mortality rates. “The reality of practicing emergency medicine in a country such as Georgia, which is characterized by mountainous areas, small cities, and rural villages, is quite difficult. We have built TelCoNet using the experiences of the past 10 years and it is a modern, efficient, and cost-effective method of providing a high level of medical support to such remote areas,” says Makhatadze, who came up with the idea for the service.

The EMS Training Center Expands and Evolves

TelCoNet represents only a small portion of the exciting new projects that have been built upon the strong emergency response and training foundation laid through the AIHA-sponsored Tbilisi/Atlanta partnership. September 1999 marked the beginning of a new era for the EMSTC in



Dr. Dimitri Makhatadze, director of the CDEM/EMSTC in Tbilisi, with Center staff member Oliko Asatiany.

Photo: Barry Kinsella

Tbilisi. In cooperation with the Ministry of Health of the Republic of Georgia, the facility took on a new and expanded national role as well as a new name that reflects the increased scope of its responsibilities. Now known as the CDEM, the facility still functions as an education and training center providing knowledge and practical experience in emergency medicine, but also serves as the hub of a growing network of national—and regional—first-response systems developed in conjunction with the United Nations Development Programme/Disaster Management Training Programme (UNDP/DMTP).

“The difficult task of developing an emergency medicine and disaster response service in Georgia that is in accordance with modern international standards is being aided by the United States Partnership for Peace Information Management Program (PIMS) and the UNDP,” states Makhatadze. While the Tbilisi EMSTC was not the only facility offering such training in Georgia, according to Makhatadze, the knowledge, education, and expertise gained during the 5-year-long AIHA partnership with Atlanta’s Grady Health Systems and Emory University School of Medicine gave the Center’s staff the high level of competence in disaster and emergency response the Ministry of Health was looking for when it decided to establish the CDEM.

The overall structure of the CDEM is

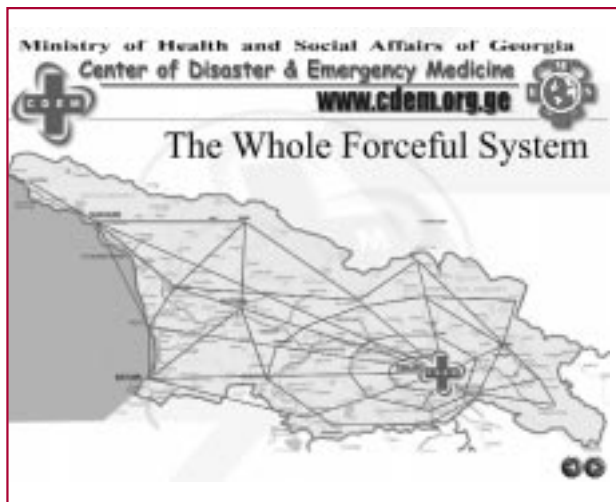
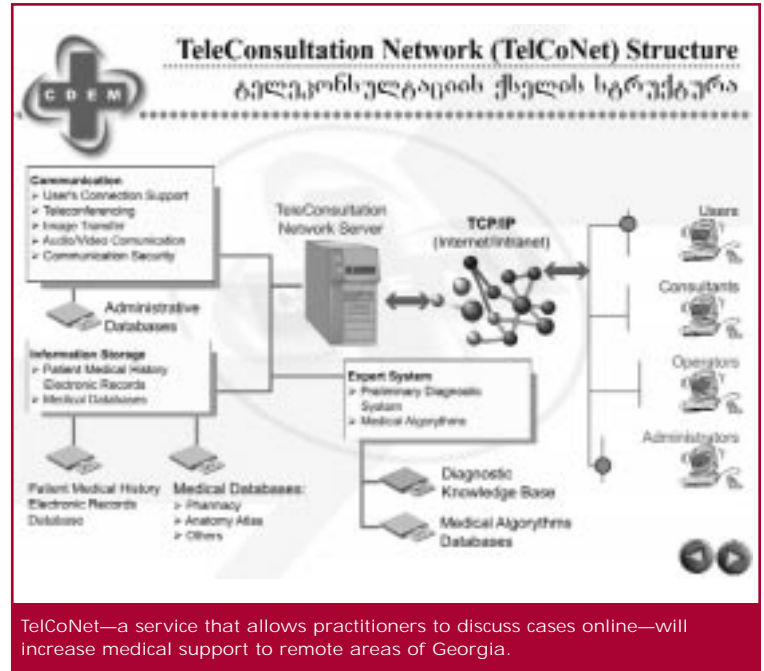
modeled in part on that of the EMSTC, which was established in October 1995 through the Tbilisi/Atlanta partnership. "In addition to facilitating training courses, our new objectives include providing technical support to improve disaster and emergency responses; encouraging collaboration among both governmental and non-governmental organizations involved in disaster management throughout the Republic of Georgia; and creating a wide variety of outreach programs and educational materials—such as curricula, CD-ROMs and other software, simulations, and printed and electronic texts. We are also in the process of developing both nationwide and regional Disaster Response Plans and intend to establish an acute poisoning and toxicological information consulting service within the framework of the CDEM," notes Makhatadze. Center staff have also appeared on "Higia," a television program that presents current information on a wide range of healthcare topics in a manner that is easily understandable to the general public.

As part of the burgeoning national response network, several hospitals throughout Georgia have already signed contracts with the CDEM, and satellite EMSTCs have been opened in Kutaisi,

Sokhumi, Zugdidi, Akhalsikhe, and Telavi. Another regional satellite center was opened in July 1999 at the Maritime Medical Center in Batumi to train sailors from the Georgian fleet in First Aid and emergency care, according to Makhatadze, and three others are slated for creation throughout the country in 2001. Illustrating that the Center's curricula can be easily adapted to the specific needs of students, Makhatadze explains, "The training programs for members of the Georgian Black Sea Navy at Batumi include a basic First Aid course for all crew members, First Aid for officers, and more intense training for shipboard medical care personnel." Additionally, the Center provides First Aid training to local police officers, governmental guards, and private clients.

Since its inception in 1995, the EMSTC has trained more than 2,600 people—roughly 80 percent of them medical practitioners. The remaining students represent a wide variety of professions ranging from police officers to oil pipeline workers and airline employees, according to Makhatadze. The Center currently offers courses in EMS Train-

ing; Basic Life Support; Basic Trauma Life Support; Medical Education and Inter-regional Harmonization Program for Nuclear Accident Preparedness; and a number of First Aid courses geared to different levels and situations. Classes in Emergency Training for Hospital Personnel, Ad-



Based in Tbilisi, the CDEM has created a network of satellite centers throughout the country.

vanced Cardiac Life Support, and Advanced Trauma Life Support are in the curriculum development stage, Makhatadze notes. The CDEM/EMSTC staff has also produced a number of emergency care and First Aid manuals and has expanded its training process to include programs taught at area schools, refugee camps, and other community-based organizations.

Building upon the past successes of the Tbilisi/Atlanta partnership, the CDEM's new endeavors, once fully implemented, could provide a model for other partners seeking to establish regional emergency response networks and use Internet technology to facilitate long-distance collaboration.

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