Moscow Diabetes Patients Benefit from Dubna Model

When the Dubna, Russia-LaCrosse, Wisconsin partnership established a diabetes school in Dubna four years ago, partners hoped to teach patients to self-manage their disease, improve patient quality of life and reduce expenditures associated with hospitalization of diabetics. Since that time, the initiative has been embraced by the town's diabetic population, making it an unqualified success: 770 patients have been trained in diabetes self-management and the Dubna Health Administration estimates it saved 188 million rubles through the program during its first two years alone.

As part of an AIHA-sponsored effort to replicate model programs that can have a broad, systemic impact, the partnership, the Russian Ministry of Health, Moscow Oblast Health Administration and Eli Lilly and Company teamed up in 1996 to replicate Dubna's diabetes education program at three sites across Moscow Oblast--in Dmitrov, Balashikha and Krasnogorsk--and two sites in the city of Moscow--Polyclinic No. 139 and Diagnostic Center No. 2. At a conference session on "Disease Management Strategies: Case Studies in Diabetes," representatives from the five sites and other US and NIS diabetes experts talked about the replication initiative and the changing face of diabetes treatment.

Since the discovery of insulin in the 1920's, diabetes has evolved "from an acute disease to a chronic disease and is now a growing, worldwide epidemic," said Frank Vinicor, MD, MPH, director, Division of Diabetes Translation at the US Centers for Disease Control and Prevention. Currently, there are seven million Russian diabetics, and the population of Moscow Oblast ranks third in new cases of diabetes per 1,000 after the nations of Peru and Japan. In the US, the prevalence of diabetes increased three-fold from 1958 to 1993.

Despite these burgeoning numbers, Vinicor noted, there has been a sea change in how the disease is viewed. "In most countries, diabetes can now be viewed as 'hot'," he said. "There have been fundamental recent understandings of the causes of diabetes, and the political systems are looking to diabetes to try to understand how to address chronic diseases."

Svetlana Birtash, MD, first deputy head, Moscow Oblast Health Administration, told conference participants: "It is important to remember this is a long-term disease that drains the government's budget. So we are always looking for the least expensive ways to manage the disease, such as monitoring blood sugar levels."

Birtash said the Oblast's diabetes centers seek to: educate patients and family members about the disease; create a registry of cases that allows for better detection of diabetes complications; and serve as a model for controlling other chronic diseases such as hypertension.

Sergei Yudin, MD, chief physician at Krasnogorsk Municipal Hospital No. 2, reported that his hospital's diabetes center educated 121 patients and parents in its first six months of operation this year. He said the initiative has saved the hospital an estimated 52.6 million rubles by reducing average length of stay and overall hospitalizations for diabetics; in 1996, 16 diabetics were hospitalized at Krasnogorsk, while only 3 were hospitalized in the first six months of 1997.

Yudin added that calls for emergency medical services have diminished markedly among Krasnogorsk's diabetics since the center opened in October 1996; patients can now consult with a staff endocrinologist via telephone if they have concerns about symptoms or reactions to treatment.

Alexandra Kniazeva, MD, of Balashikha District Central Hospital said the Dubna school had inspired her hospital's diabetes center to promote a new approach to diabetes treatment

among its staff. "Previously, doctors had no time for education of the patient. The first thing we did was to create new conditions ... an environment similar to the family environment. We needed to reconstruct the psychology of the doctors," she said.

At Dmitrov Municipal Hospital, 152 patients and 30 parents had been trained in diabetes management as of last July. "This is something that was sorely needed," said Dmitrov's Marina Vasilieva, MD. "Our patients are more sure of themselves. They look at the world with bright eyes. Their blood sugar levels are down, and they don't need to call emergency medical services anymore."