Leading the Charge:

Southern Ukraine AIDS Education Center Provides Clinical Training to Prevent Mother-to-Child Transmission of HIV Throughout Eurasia

BY KATHRYN UTAN

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s Eurasia continues to experience the world's fastest-growing rate of HIV infection, healthcare professionals from the Baltic countries to Central Asia are desperate for knowledge and training that can help them provide care to their patients and stop the raging epidemic in its tracks. In June 2003, AIHA partners at the Odessa Oblast Hospital in Ukraine became pioneers in the effort to build capacity among healthcare professionals throughout the region by opening a communitybased treatment and allied training center where physicians, nurses, counselors, and policymakers can learn about Odessa's highly successful prevention, care, and treatment model.

Established by AIHA and the Odessa Oblast Hospital with support from USAID, the Southern Ukraine AIDS Education Center (SUAEC) has its roots in Odessa's highly-successful project for the prevention of mother-to-child transmission (PMTCT) of HIV. A collaborative effort among the Oblast Health Administration, Odessa Oblast Hospital, Odessa Women's Wellness Center (WWC), Odessa State Medical University, AIHA, Boulder Community Hospital, Médecins Sans Frontières (MSF), and several local non-governmental organizations (NGOs), the Odessa PMTCT Project not only focuses on preventing transmission of HIV from mothers to their infants, but has also facilitated broad, systemic change by helping to reorganize health service delivery, adapt evidence-based treatment protocols to limited-resource settings, and develop training materials and curricula for healthcare professionals.

Since the PMTCT Project's inception in late 2000, the rate of vertical transmission has dropped from a pre-program high of 24 percent to 6 percent in 2003. Additionally, through the program, a cadre of Odessa clinicians has received advanced training in gynecology, obstetrics, neonatology, HIV-related clinical practice guidelines, infection control, and patient counseling. It is this group of dedicated professionals who share their knowledge, skills, and wealth of experience with colleagues from throughout the region by serving as trainers at periodic workshops held at SUAEC.

As Ukraine's HIV/AIDS Epidemic Evolves, an Effective Model of Care Emerges

With an estimated HIV prevalence rate among adults at slightly more than 1 percent, Ukraine has the dubious distinction of being the most affected country in all of Europe. The nation reported its first cases of HIV in 1987—quite early when compared to most countries of the former Soviet Union, according to Lev

Mogilevsky of the Ukrainian Ministry of Health's Anti-plague Institute. Between 1987 and 1994, the virus progressed very slowly with an average of 30 new cases per year.

"During this time period—what we define as stage one of the epidemic—the disease was transmitted to sex workers in Odessa, Donetsk, and the Crimea," he explains, noting that by the end of 1994 the number of people infected remained low at 398. But then the tide turned and the epidemic truly exploded.

"Between 1994 and 1995, the number of infections increased 34-fold and injecting drug use became the primary mode of transmission. Additionally, sexual partners of injecting drug users (IDUs) and people who contracted HIV through transfusions or other medical procedures using contaminated equipment were also among those newly infected," Mogilevsky reports. During this second stage of the epidemic, HIV rates remained high in Odessa, Donetsk, and Crimea, but also spread rapidly to Nikolaev. It was at this stage that Ukraine experienced its first cases of mother-to-child transmission of the virus, he notes, "ushering in stage three of the epidemic—where we are now—at a point when the disease has saturated the high-risk groups and is spreading into the general population.

As of 2000, the proportion of women in our HIV-infected population was 36.8 percent, which is comparable to the situation in sub-Saharan Africa."

In addition to these grim figures, Ukrainian Ministry of Health statistics indicate that nearly 38 percent of all new HIV infections reported in the first six months of 2003 were attributed to heterosexual intercourse and the number of infants born in Ukraine to HIV-positive women almost doubled between 2001 and 2002. At the epicenter of the country's raging epidemic is Odessa, a Black Sea port city with one of the highest infection rates in the country.

For pregnant women in Odessa, the problem of mother-to-child transmission of HIV is very serious, explains Svetlana Posokhova, deputy chief of obstetrics and gynecology at the Odessa Oblast Hospital and director of the Odessa WWC, which was established in 1998 through the efforts of AIHA's Odessa/ Coney Island partnership. The city is a crossroads where there is a good deal of drug trafficking and prostitution, which only serves to strengthen the disease's foothold there. "In the United States, vertical transmission rates are less than 2 percent while in Ukraine they can reach as high as 30 percent," she says, noting that more than 3.5 percent of all deliveries at the hospital's maternity ward in 2003 were to HIVpositive women.

Continued contact with HIV-positive pregnant women and discussions with staff at local NGOs allowed the Odessa partners to learn about the problems people living with HIV/AIDS face on a daily basis. Individuals diagnosed with the disease may turn to the Regional AIDS Center for care and a very lucky

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few may receive anti-retroviral (ARV) therapy. However, most other healthcare facilities refuse to treat them—sometimes because of fear or ignorance, other times because clinicians lack the necessary training and supplies to offer proper care. For many patients, the trip to the AIDS Center, which is located on the outskirts of the city, is a difficult one they can ill afford given their physical and financial circumstances. And, because HIV/AIDS is a disease that is often associated with behaviors that are shunned by society as a whole—injecting drug use and prostitution, for example—each visit to the Center can also bring the added burden of further stigmatization.

In addition to the serious problems associated with accessing clinical care, partners discovered that many critical social care services for HIV-positive people are also sorely lacking or even nonexistent. This situation is mirrored throughout the region as national and local health-care authorities continue to struggle with economic and health system reform issues and funds allotted for HIV/AIDS-

related care and prevention programs remain woefully insufficient in the face of swiftly rising infection rates.

After working with HIV-positive patients for more than a decade under these circumstances, the idea to establish a training center where the knowledge and experience gained through Odessa's PMTCT program can be effectively disseminated to other medical professionals throughout the region was the next logical step, explains Posokhova, who is also the director of SUAEC.

Spreading Life-giving Knowledge to Other Countries in the Region

HIV-positive women in Odessa are not the only ones who benefit from the lessons learned through the PMTCT Project. Healthcare providers, policymakers, social workers, and lay counselors from across the region gain life-saving knowledge through SUAEC's training courses, which use the hospital, WWC, and a community-based follow-up care clinic established by the partners for women who participate in the pilot PMTCT project—as well as a host of local NGOs-to illustrate how PMTCT and other HIV-related care strategies can be effectively implemented in limitedresource settings.

The first training session marking SUAEC's opening in June 2003 brought together healthcare providers and policymakers from Kazakhstan, Moldova, and Russia for a three-day workshop sponsored by AIHA as part of its efforts to replicate and scale up effective PMTCT programs in these countries. Since then, the Center has trained more than 200 professionals through seminars that include lectures and site visits, as well as meetings with clinicians, representatives

of local NGOs, and actual patients—all designed to provide a comprehensive picture of Odessa's model of care. Strictly defined, it is considered a "+PMTCT+" program because in addition to working to prevent mother-to-child transmission of HIV, the model includes substantial pre- and post-pregnancy components that focus on preventing HIV infection among women of reproductive age and providing family planning services for HIV-positive pregnant women (pre-pregnancy), as well as follow-up care and support for women, their infants, and their families (post-pregnancy).

Underscoring the importance of learning from healthcare professionals who already have experience addressing rising HIV infection rates in limitedresource settings rather than wasting precious time and resources, Zhanna Trumova, head of the Outpatient Department at the Kazakh National HIV/AIDS Center and a participant in SUAEC's first workshop, says, "In Odessa, we were able to draw upon the richest pool of knowledge and experience regarding HIV/AIDS in general, and PMTCT in particular, that exists in the region today." Although Kazakhstan currently has only 3,591 registered cases of HIV, the disease is definitely on the rise with the cities of Almaty, Chimkent, Karaganda, Pavlodar, and Temirtau being hit the hardest, Trumova explains, citing an increase in the number of pregnant HIV-positive womenfrom 5 in 1997 to 75 by 2002—as an indication that HIV is rising steadily in this Central Asian nation.

"This type of training provides critical practical experience for clinicians especially gynecologists and obstetricians who play a key role in educating their patients about the importance of preventing HIV in the first place," continues Trumova, noting that increasing public awareness is an integral component in the battle to stop the disease from spreading further.

Agreeing that educating people—both healthcare practitioners and the community at large—is crucial in the fight against HIV/AIDS, Tamara Dzusubalieva, director of the Almaty WWC and president of the Kazakh Association for Sexual and Reproductive Health, lauds the clinical practice guidelines and other didactic literature distributed to SUAEC trainees. "My colleagues and I practically devoured the information brought back from the Odessa workshop. It changed our attitudes about proper care for HIV-positive individuals and now we realize that it is not necessary to isolate pregnant women infected with HIV and their babies in separate mater-

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nity wards," Dzusubalieva explains. "It is crucial that we provide these patients with high-quality, comprehensive clinical and support services, and advanced training is the first step," she says, noting that HIV-positive pregnant women will be referred to the Almaty WWC for prenatal, intra-partum, and postnatal care in the future.

While reported HIV incidence rates may still be low in Kazakhstan, infections in Russia are skyrocketing. With the total number of reported cases jumping from fewer than 11,000 in 1998 to more than 200,000 by mid-2002, according to UNAIDS statistics, the Odessa Model can play an important part in stemming the rising tide of the disease.

Noting that Ukraine was one of the first countries in the region to be faced with the HIV/AIDS epidemic, Marina Antimonova, head of Samara Oblast Healthcare Administration's Maternal and Child Health Department and a trainee from Russia, concludes, "The practitioners in Odessa have acquired a great deal of experience in dealing with HIV-positive women and their families. They know how to integrate all the various components of care—clinical services, social support, peer counselling, and more. We need to draw on this precious knowledge rather than struggle to reinvent the wheel when every minute can be a matter of life or death."

With HIV prevalence in the Samara region at 593 per 100,000, healthcare providers are well aware that the disease has more than reached epidemic proportions, Antimonova acknowledges. "This year, as many as 1,500 pregnant women in the oblast are known to be HIV-positive and receiving prenatal care. These women

are given ARV drugs beginning in the 24th week of gestation, which greatly increases the likelihood that they will have healthy babies. But, that is not the case for the HIV-infected women who do not seek medical attention prior to delivering their infants," she explains.

While clinical care for HIV-positive women is accessible in the Samara region, Antimonova is quick to point out that social support is hard to come by. "Healthcare facilities in the oblast do not offer these services and local NGOs are underdeveloped and poorly equipped to provide them. While social support is what this segment of the population desperately needs, many HIV-positive individuals tend to keep their condition a secret because of the social stigma and multiple prejudices they face due to a lack of understanding about the disease among the general population. They are afraid that if their status becomes known they will lose their jobs and associated benefits," she adds.

Noting that a healthcare infrastructure that supports information flow and continuity of care for HIV-positive pregnant women is already in place in the region, Andrei Bykov, director of the Samara AIDS Prevention and Treatment Center, says the workshop he attended was an important learning experience. "Odessa was one of the first cities in the region to initiate this type of work with HIV-positive women and they have managed to set up a system that is much more effective than similar endeavors in Russia or other countries in Eastern Europe."

What sets the Odessa model apart, Bykov explains, is that the trainers are handson professionals rather than infection control specialists. "A trainer must know the realities of an individual field of practice so, for example, ob/gyns who are well-versed in performing Caesarean sections on HIV-positive women can offer sound, practical advice."

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Practical skills, however, are just one aspect of the knowledge gained by workshop participants. Equally important is the impact the training had on their attitudes toward HIV-positive individuals and the problems they face, according to Vladislav Romanenko, vice rector of the Ural State Medical Academy of Continuing Education and director of the Chelyabinsk Neonatal Resuscitation Training Center established by AIHA's Chelyabinsk/Tacoma partnership.

"When the first baby in our region was born to an HIV-positive mother, we didn't know what to do with him—should we transfer the child to another facility or keep him in the ICU despite our fear of the disease he might carry?" Romanenko recounts, noting that the workshop made him realize that his colleagues in Odessa once felt the same way. "They showed us the standard uniform they used to wear when treating HIV-positive patients; it resembled an astronaut's suit and clearly illustrates the fear and lack of understanding that too often surrounds the disease. The training gave us a much better idea of how to provide high-quality care to these women and their babies in a regular clinical setting, while at the same time protecting ourselves from the infection," he says.

Calling both SUAEC and the community-based clinic developed with support from AIHA and MSF a blending of resources that allows the Odessa community to create their own solutions to the HIV/AIDS problem they face, Barbara Fisher, vice president and coordinator of international programs at Boulder Community Hospital, the lead US institution for AIHA's PMTCT partnership in Odessa, says, "Our partners decided this training center was an absolute necessity because the positive results demonstrated during the first two years of the pilot program have great implications for a sustainable approach to preventing mother-to-child transmission of HIV in Eurasia or any other resource-limited region in the world. They are spearheading this project with incredible tenacity and dedication. They are getting support from organizations such as MSF, AIHA, and our team in Boulder, but this is their issue and it is their success."

Recognized as a PMTCT "center of clinical excellence," SUAEC plays a key role in building both human and organizational capacity across the former Soviet Union through a collaboration with the Regional Knowledge Hub for the Care and Treatment of HIV/AIDS in Eurasia.