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Partner News



Series of Trainings Enhance Capacity of Healthcare Practitioners to Control TB in Moldova

Moldova is among those former Soviet countries presently facing a growing epidemic of tuberculosis. According to WHO estimates, some 5,800 people in Moldova develop TB every year. This situation is attributed to severe socio-economic difficulties facing the newly independent country, shortages of high-quality TB drugs, and limited TB diagnostic and treatment skills among primary healthcare practitioners, as well as a deficient laboratory network that is unable to perform adequate cultures and drug susceptibility tests.

To assist the government of Moldova in its effort to control the country's TB epidemic and prevent new infections, AIHA has initiated a four-year, USAID-funded program that builds sustainable capacity of both institutions and healthcare providers to effectively respond to the nation's TB crisis. Launched in October 2003, AIHA's "Strengthening Tuberculosis Control in Moldova" project focuses on combating tuberculosis by



TOT workshop participants discuss effective adult learning techniques.
(Photo: Ina Lisnic.)

- upgrading the country's network of TB laboratories,
- improving the nation's ability to deal with TB at the primary care level,
- building the surveillance capacity necessary to track tuberculosis and the spread of multi-drug resistant strains of the disease,
- increasing public awareness about the infection, and
- strengthening the skills of local healthcare professionals in diagnostic, treatment, and prevention strategies.

As part of its human capacity building plan, AIHA recently sponsored two workshops designed to prepare a national TB faculty who will facilitate all TB-related trainings in the country thereby expanding the diagnostic, treatment, and prevention skills of more than 500 primary care practitioners over the course of the next three years. Because primary care providers are often a patient's first point of contact with the healthcare system, they play a particularly important role in tuberculosis control.



Vitalie Popa, a teacher from Chisinau's ProDidactica Education Center, participates in the "flying egg" exercise, which is designed to perfect the communication skills of the future trainers. (Photo: Valeriu Crudu.)

In preparation for the launch of the primary care practitioner workshops, two groups of trainers—each comprised of one tuberculosis specialist, a family physician, and a nurse—traveled on July 19-23 to the State Center for Tuberculosis and Lung Disease (SCTLD) Riga, Latvia, where they learned about key elements of WHO's recommended Directly Observed Treatment Short Course (DOTS) strategy, case management of TB in the hospital and ambulatory phases of treatment, laboratory procedures, and quality control. The purpose of a second train-the-trainers session, which took place at the Training Center ProDidactica in Chisinau on August 20-24, was to provide the future faculty with communication and teaching skills

that would enable them to better disseminate the acquired TB-related knowledge among primary care providers. Both trainings were conducted by experts from the University of Arkansas for Medical Science, SCTLD, and ProDidactica Education Center, as well as AIHA TB advisors.

The national faculty put their new knowledge and skills to use during the first training seminar for primary care practitioners, which took place September 29-October 1 at the University Clinic for Primary Healthcare in Chisinau. Some 50 primary healthcare physicians and nurses from different regions of Moldova gathered to learn how to effectively decrease the burden of TB in their own communities through early detection, referral for treatment, and community education and outreach. The goal of this and future training sessions is to enable Moldovan family medicine professionals to limit transmission of the disease both among healthcare workers and general population, which will in turn enhance the capacity of the nation's healthcare system to deliver care and services to TB-infected individuals who tend to be poor and marginalized.



Leaders from Azerbaijan and Georgia Learn About Effective HIV Prevention Programs

The criteria that determine if an individual is at higher risk of contracting HIV has recently come under debate throughout much of the former Soviet Union. Previously, HIV/AIDS was considered to be almost wholly the lot of injecting drug users (IDUs) and those who receive money for sex. Today, however, that limited picture is rapidly changing as increasing numbers of people from mainstream society have begun to join the ranks of those living with the virus. While IDUs remain the main engine driving the infection's spread throughout this region of the world, heterosexual transmission is steadily growing and now accounts for between 20 and 50 percent of all new cases.

WHO data show that among Eurasian countries, Ukraine and Russia have the highest HIV/AIDS prevalence rates. According to international experts, one percent of the adult population in both these nations is infected. The overwhelming majority of those carrying the virus are people of reproductive age, including many women who still want to have a family and children of their own. At present, statistics indicate that the greatest number of children born to HIV-infected mothers live in Ukraine, which is the country where two-thirds of all the infants born to HIV-positive women in Eastern Europe and Central Asia live.

Elsewhere in the region—the Caucasus nations of Azerbaijan and Georgia, for example—the epidemic has yet to progress quite so far, so they have the unique opportunity to effectively address HIV/AIDS before it can snowball out of control. With this goal in mind, AIHA recently conducted a seminar designed to brief healthcare professionals from both these countries on principles and methods of prevention of mother-to-child transmission (PMTCT) of the virus. Held August 25-29 at the South Ukrainian AIDS Education Center (see: ["Odessa Pilot PMTCT Project Helps HIV-Positive Women Give Birth to Healthy Babies, Leads to Creation of Community-based Follow-up Care Clinic and Regional Training Center."](#)) located at the Odessa Oblast Clinical Hospital (OOCH), the event provided



Natalia Nizova explains the benefits of pre- and post- HIV test counseling for pregnant women. (Photo: Jeyhoun Mamedov.)

participants with a first-hand look at AIHA's model PMTCT program, which has helped reduce vertical transmission in Odessa by 75 percent over the course of the past three years.

During the meeting, attendees not only learned about the functional components of the PMTCT model, but also witnessed how the model was integrated into OCH's existing structural units, including the Maternity House, Women's Wellness Center, and Satellite Clinic, as well as the Odessa Oblast AIDS Center, which collectively provide a comprehensive network of services to HIV-positive women, their children, and their families.

The importance of providing pre- and post- HIV test counseling for pregnant women was also stressed as a vital component of any credible PMTCT model. High-quality counseling is not just a cost-effective approach to healthcare, but—more importantly—it is an educational tool that provides women with critical knowledge about HIV/AIDS and how the infection is spread. It also helps them make more informed choices about testing. In cases where an HIV-positive status is diagnosed, post-test counseling helps the patient commit to preventive therapy and an appropriate course of treatment.

AIHA Medical Advisor on Maternal and Child Health and HIV/AIDS Natalya Nizova, who served as an instructor for the seminar, explains that implementing voluntary counseling and testing is crucial because Azerbaijan and Georgia are currently in the first stage of the HIV epidemic with fewer than 1,000 cases registered in each country—a perfect time to ramp up prevention and education programs.

Nevertheless, some key obstacles do exist. The Ministry of Health of Azerbaijan, for example, indicates that approximately 20 percent of Azeri women are admitted to hospitals for delivery without having prenatal examinations and that one-third of all births in Azerbaijan take place at home. This means that the majority of probable cases of HIV-infection simply go unrecorded. The situation in Georgia has its own challenges. Pregnant women in that country are only tested for HIV if risk factors are present. Relying solely on this approach, just 500 women out of the approximately 50,000 who give birth each year are screened.

"Currently, HIV-positive pregnant women are only discovered under specific and limited circumstances, but the development of pre- and post-test HIV counseling services will make it possible to identify significantly more mothers-to-be who are infected with the virus," Nizova remarks.

Participants at the seminar attended presentations on a number of other topics that fall under the general heading of providing effective care to HIV-infected women. These include counseling on family planning for HIV-positive women; special measures to reduce the risk of MTCT during pregnancy and delivery, as well as after birth; and psychological care and social support for HIV-positive women, their children, and their families, which is provided within the Odessa PMTCT project by volunteers—mostly members of non-governmental organizations that focus on HIV/AIDS.

Noting statistics that indicate most HIV-positive women in Azerbaijan and

Georgia were infected by their husbands, Nizova stresses the need for healthcare professionals to pay special attention to counseling pregnant women about the prevention of HIV transmission between spouses.



Igor Boychenko, head of OCH's OB/GYN Observation Department, demonstrates methods healthcare providers who work in delivery rooms should use to prevent occupational exposure to HIV.
(Photo: Jeyhoun Mamedov.)

"Both of these countries have a problem with migration and many men travel to other countries to work. Some of them come home with HIV," Nizova says, citing statistical data that reveal the overwhelming majority of HIV cases in the Caucasus came from Russia and Ukraine. "The situation is aggravated by the existence of cultural traditions according to which a woman is not allowed to insist that her husband use a condom during intercourse, which, naturally, has the worst possible consequences in some cases," Nizova explains. "The fact that this happens indicates that the population is insufficiently informed about the problem of HIV. Therefore, during the seminar we spent a fair amount of time on the methodological aspects of patient education."

In addition to discussing how to organize timely and accessible prevention services for pregnant women, methods for controlling HIV in obstetrical settings—including preventing occupational exposure among medical personnel—were covered during the seminar, as was essential monitoring and evaluation of PMTCT programs.

Along with the theoretical and practical lessons, SUAEC instructors organized a number of meetings for participants with Odessa's deputy mayor and staff from the Internal Policy Department of Odessa's Municipal Executive Council. These meetings provided an overview of HIV prevention programs associated with social partnerships between city authorities and NGOs working throughout the oblast.

"Our goal was to give the maternal and child health decision-makers attending the event a clear understanding that PMTCT is one of the critical steps they can take to help ensure the health of their citizens," Nizova concludes. "By sharing our experience, we can show others how to develop an effective system of care and support for HIV-infected mothers and their infants. At the same time, we wanted to draw our colleagues' attention to the seriousness and depth of the problem as a whole and, in particular, what it means when the HIV epidemic strikes women."



AIHA's PMTCT Program and Regional Scale-up Strategy Showcased at International AIDS Conference in Bangkok

For 20 years, the HIV/AIDS epidemic has been striking the world. Already

affects the lives of twice that number and threatens to escalate even more, particularly among poor and vulnerable populations. Nevertheless, according to the International AIDS Society, only one out of five people worldwide has access to HIV prevention programs and only seven percent of the 5-6 million people in need of HIV treatment in low or middle-income countries received it in 2003.

What have developing countries and their partners done to scale-up successful community-based programs? What new drugs have pharmaceutical companies made available to millions who need them? What actions should be taken to open access to unbiased information and education about HIV/AIDS, access to effective preventive tools and comprehensive medical care, access to essential HIV-related science, access to resources that will minimize the impact HIV/AIDS has on human lives?

These questions and many more were explored at the XV International AIDS Conference, held in Bangkok, Thailand, July 11-16, 2004. The theme of this extraordinary gathering attended by more than 17,000 delegates from 160 countries—Access for All—underscored the urgent need for increased resources and the importance of accountability in creating access to HIV/AIDS prevention, management, and care for all people regardless of geography, ethnicity, or economic standing.

In addition to skills-building workshops, debate sessions, and panels, the conference agenda included abstract presentations that had been selected from more than 10,000 original submissions and offered the highest caliber of state-of-the-art knowledge spanning basic scientific areas, clinical research and treatment, epidemiology and prevention, and social and economic issues, as well as policies and programs that have proven successful at addressing questions of access to HIV/AIDS treatment and care.

The conference program included speakers from across the full spectrum of the global HIV/AIDS community—world leaders and world-renowned scientists; healthcare professionals working in the field; people living with HIV/AIDS; religious, intellectual, private, and non-governmental sectors leaders; and representatives of the arts and entertainment industries. Many of them argued that in order to prevent further growth of the HIV/AIDS catastrophe, the social, political, and economic status of women should be addressed, noting that failing to do so will undermine the long-term effectiveness of any efforts to fight the AIDS pandemic.

The event highlighted the fact that, worldwide, women represent a growing proportion of adults living with HIV/AIDS, increasing from 41 percent of those infected with the virus as of 1997 to 48 percent as of 2003. And still that number continues to grow. According to a number of speakers, women are at greater risk for many reasons—most of which stem from gender inequality. The inability to negotiate safer sex due to imbalances of power, the lack of female-controlled HIV prevention methods, or ignorance in the issues of HIV/AIDS transmission, for example—all make women more vulnerable to infection. These and a host of other factors not only contribute to rising rates of transmission to the female population, but also present a threat to the health of children born to HIV-positive women, who can contract the virus as a result of mother-to-child transmission.

Poster Presentations Highlight AIHA's PMTCT Programs in Eurasia

AIHA's highly successful program for the prevention of mother-to-child transmission (PMTCT) of HIV/AIDS and its scale-up strategy for replication in other resource-limited settings throughout Eurasia were the focus of five poster sessions presented by AIHA staff during the conference. First implemented at the Odessa Oblast Clinical Hospital (OOCH) in late 2000 as part of the USAID/AIHA-sponsored partnership program that linked the Ukrainian institution with Boulder Community Hospital in Colorado and other US HIV/AIDS specialists, the Odessa PMTCT Model successfully decreased vertical transmission rates by 75 percent over the course of three years. This Model, which is based on a comprehensive strategy endorsed by WHO, UNICEF, and UNAIDS, integrates four basic components:

- primary prevention of HIV infection through access to education,
- prevention of unintended pregnancies among HIV-positive women,
- use of efficacious antiretroviral drugs and specific clinical procedures to prevent vertical transmission, and
- comprehensive healthcare delivery services specifically designed for HIV-positive women, their newborns, and their families.

Another essential element of the Odessa PMTCT Model is its case-based management and monitoring system. A computer-based data collection system developed by Ooch staff allows healthcare providers to gather and analyze relevant patient information throughout all stages of healthcare delivery. Use of this data system—which is available on CD-ROM in Russian with corresponding instructions on installation, data entry, and analysis—has demonstrably improved the quality of maternal and child healthcare by measuring the effectiveness of care at prenatal, delivery, postpartum, and follow-up stages. This technology transcends institutional boundaries and provides information across a multi-institutional continuum of care, which is essential for the effective treatment of individual patients with HIV/AIDS.

Experience shows that preventing pediatric HIV infection is less costly than caring for children who develop HIV/AIDS, especially if highly-active antiretroviral therapy is used. The Odessa PMTCT Model therefore represents a system that can be replicated in other resource-limited settings—particularly in the countries of the former Soviet Union, which have similar healthcare infrastructures and delivery systems.

In 2003, the Odessa PMTCT Model was set for replication in seven other cities and oblasts spanning the former Soviet Union. Thanks in no small part to the program's success in Odessa and the creation of these expansion sites, the Southern Ukraine AIDS Education Center (SUAEC) was established at Ooch to provide practical, skills-based training to healthcare professionals throughout the region. Since its inception, SUAEC has trained more than 200 professionals for the selected beta sites—Chisinau, Moldova; Samara and Togliatti in Russia; and Almaty, Karaganda, Pavlodar, and Timertau in Kazakhstan—where replication has already begun. The sites were selected by USAID and AIHA based on HIV-infection rates and previous AIHA programmatic experience in the region. At the Bangkok conference, the AIHA team presented a situational assessment of HIV/AIDS and in Kazakhstan as an example of the organization's site selection strategy. Using an adapted WHO rapid assessment tool, data was collected

through interviews at 16 healthcare institutions and five non-governmental organizations in Timertau, Karaganda, and Pavlodar—three cities in Kazakhstan with the most significant number of HIV cases, where vertical transmission ranks third among routes of infection. This survey will help evaluate the effectiveness of the PMTCT response in the country after the replication sites achieve their full pace.

According to Natalia Nizova, AIHA's medical advisor on maternal and child health and HIV/AIDS and a member of AIHA's delegation in Bangkok, "The information about PMTCT was in great demand among the participants and we are glad that we were able to share our experience as well as learn from others present at the event." In Nizova's opinion, the conference clearly showed that HIV/AIDS was no longer the sole burden of high-risk groups and that it is critical to shine a spotlight on the issue of women's vulnerability to infection. "In Odessa alone, 50 percent of HIV-infected women belong to the socially-successful layer of society. The majority of them got infected through heterosexual intercourse. This means that the foremost goal of healthcare institutions and NGOs involved in the response to the epidemic should be ensuring the access of all women to education about HIV/AIDS. In a situation like this, only a broad information campaign targeting both infected people and those whose lives can be affected by this disease can successfully curb its spread, and that is what we need to start doing immediately."

The delegates reconfirmed their commitment to saving the lives of people living with HIV/AIDS and preventing new cases of infection. "I pledge to work together with you in ensuring that these commitments are met," said Jong-wook Lee, director-general of the World Health Organization, assuring the participants that WHO will continue to work at the forefront of global efforts to prevent and treat HIV/AIDS. "History will judge all of us by our response to HIV/AIDS. That response must meet the high ambition and bold commitments of this conference: 'Access for All.' Let us now go and put it into practice."

Regional News

Ukraine Plans to Produce ARV Generics to Provide Access to Medicine for All PLWHA

Ukraine is currently facing an HIV/AIDS epidemic, which, according to foreign and domestic experts, has already affected some 560,000 people, or more than one percent of its population. Until recently, antiretroviral therapy that can improve the health of HIV-infected individuals was a privilege accorded to fewer than 200 people although WHO estimates that approximately 15,000 Ukrainian citizens require such treatment. This dire situation began to improve this summer, however, when the country was able to purchase antiretroviral (ARV) drugs from abroad with money allocated by the Global Fund for HIV/AIDS treatment and care. As a result, more than 2,000 people living with HIV/AIDS have joined the ranks of those receiving potentially life-extending therapy.

According to a recent article in the *Kyiv Post*, an English-language newspaper based in the Ukrainian capital, the country's Ministry of Health recently

announced its decision to allow local pharmaceutical companies to start production of six types of generic ARVs as part of the national campaign to meet the rising needs of Ukrainian citizens living with HIV/AIDS and in need of antiretroviral therapy. The main appeal of this option for Ukraine is in that generic ARVs cost, on average, as much as 10 times less than their brand-name equivalents, the newspaper reports.

Commenting on the situation, Vyacheslav Fedchenko, public relations manager of the Ukrainian pharmaceutical corporation—Kyivmedpreparat—told the *Kyiv Post* that even though the production of generic drugs costs much less than that of patented medications, Ukrainian pharmaceutical companies are not capable of funding the ARV projects with their own resources, and thus they will have to consider joint ventures with foreign investors. "The Ukrainian pharmaceutical industry simply cannot afford the research and development costs, which can reach \$900 million for every new ARV medication—an amount equal to Ukraine's pharmaceutical market's annual retail capacity," he explained.

The *Kyiv Post* article notes that the provisions of the Doha Declaration, under which developing countries are allowed to import or produce generic copies of patented drugs without the authorization of their owners, made possible the introduction of generic ARV drugs in Ukraine. However, the Declaration also stipulates that this provision will expire at the end of 2005, after which this source of affordable medicines will dry up.

In this situation, members of the Ukrainian government and local pharmaceutical makers are trying to use this opportunity to learn about technologies used by other countries to manufacture ARV generics. As the newspaper reports, this was the purpose of a recent visit made by Deputy Health Minister of Ukraine Mikhailo Pasichnyk and a group of national drug-makers to Brazil—a country with longstanding experience in producing ARV generics. Before the trip, Ukraine's Health Minister Andriy Pidayev conducted negotiations with representatives of the US-based Clinton HIV/AIDS Initiative, during which both sides agreed that Ukraine will import Indian-made generic ARVs at a cost of half their market values. In doing so, Ukraine will spend as much as 30 times less on the Indian generics than it would for the same quantity of brand-name ARV drugs.

Even though the Ukrainian officials seem optimistic about the generic drugs alternative, the *Kyiv Post* reports that some patients and health professionals do not share their optimism.

According to Yaroslava Lopatina, a physician with the Lavra HIV/AIDS Clinic at the Kiev Institute of Epidemiology and Infectious Diseases, it is too early to praise the effectiveness of generic ARVs, as the Clinic has only been using them for the last three months, while brand name drugs have been used there since 2000.

To dispel concerns about the efficacy of generic drugs, the *Kyiv Post* cites that tests done by WHO proved brand-name drugs and their generic copies to be identical in their effectiveness.

Viral Hepatitis Strikes Kyrgyzstan and Kazakhstan

IRIN reports that Kyrgyzstan's southern regions, including the country's second largest city Osh and its surrounding areas, are in the midst of an acute viral hepatitis epidemic. According to official statistics, some 1,500 citizens of this region—1,200 of whom are children under the age of 14—have become victims of various forms of this disease in the last eight months.

Specialists from the Osh Regional Epidemiological Control Center say that this year the number of hepatitis cases has doubled in comparison with the last year and that people from rural areas and children are most likely to be afflicted.

Health officials say that hepatitis A represented approximately 95 percent of all registered cases with hepatitis B and C—both hard-to-cure forms of the disease—comprising the remaining 5 percent of infections.

IRIN reports that the cost of diagnosing and managing hepatitis A comes to \$300 per patient, while \$370 and \$450 are needed respectively to help hepatitis B and C sufferers. Healthcare providers state that funds for the diagnosis and treatment of hepatitis are allocated from the state budget. However, according to *IRIN*, patients complain that the medications they receive from hospitals are ineffective, which forces them to buy other medicine out of their own pockets.

Thus, the father of a 26-year-old woman who contracted hepatitis B a few months ago told *IRIN* that his family had spent approximately \$1,000 on her medication. "Many families become heavily indebted [in order to provide their relatives with the appropriate treatment]," he said, explaining that the average monthly income of local farmers is only \$25.

IRIN reports that local epidemiological services try to stop the spread of the infection through the establishment of preventive service centers and by raising awareness among the local population at public meetings. Unfortunately, the lack of appropriate sanitary resources and epidemiological measures undermines the effectiveness of their efforts in fighting the disease. According to local health officials, even simple disinfectants are in short supply, not to mention reagents for the hepatitis virus detection. In this situation, hepatitis continues to spread across the region. In Osh alone, some 100 new cases were reported last month.

IRIN also says that a steep rise of the disease has also been observed in Kazakhstan, where some 300 cases of viral hepatitis were registered last month in the town of Abay in Karaganda province. Commenting on the situation, a health official based in the Kazakh capital Astana told *IRIN* that recent cases were caused by a breakdown in the city's water supply system, which is old and hasn't been repaired for 20 years. This breakdown led to an overflow of the sewage and the subsequent contamination of the drinking water system, causing the epidemic.

Russian and Ukrainian Citizens Face Iodine Deficiency

Recent UNICEF research shows that iodine deficiency—the main cause of mental retardation—can affect new generations in Russia and Ukraine. According to a report published by *Reuters*, these countries are home for half of all babies born in the former Soviet Union and Eastern Europe who are in need of iodine

supplementation. The report also emphasizes that iodine is extremely important during the early stages of pregnancy when the fetus's brain is developing and that it is vital for women to consume a sufficient amount of this mineral during their reproductive years. UNICEF warns that a lack of iodine can reduce intellectual capacity of babies by 10 to 15 percent.

"This is one of the few problems we know how to solve," former world chess champion and UNICEF ambassador Anatoly Karpov said in an interview with *Reuters*, underscoring the fact that it costs only five U.S. cents to provide the human body with its yearly iodine supply, nevertheless, only 48 percent of families in Central Europe and Eurasia presently use iodized salt.

In his interview, Karpov stressed that the governments of Russia and Ukraine intend to launch programs aimed at increasing iodine consumption among their populations. Reuters reports that the Russian State Duma has drafted the appropriate legislation while the Ukrainian parliament is discussing a presidential decree that will help to solve current iodine deficiency problem.

Workshops, Conferences, Opportunities and Grants

International Council of Nurses 23rd Quadrennial Congress

The International Council of Nurses' global governing body—the Council of National Representatives—will convene its 23rd Quadrennial Congress on May 21-27, 2005, in Taipei, Taiwan. The event will raise issues of nursing professional practice and regulations, social-economic welfare, and education, as well as elaborate on new roles of nurses and present latest researches in the sphere of nursing. For more information about the event, please, go to:

www.icn.ch/congress2005/info.htm

American Medical Informatics Association's Congress

Best Practices for Ambulatory Care Physician Order Entry (ACPOE) and Population Managements with EHR will be the focus of the next AMIA congress held on April 11-13, 2005, in Boston, Massachusetts. Because the ACPOE is currently at the forefront of the medical community's attention as a mechanism to improve the quality of healthcare, prevent errors, and empower providers to transform their own healthcare practice, the congress will demonstrate best practices in this sphere so participants will be better able to implement and support ACPOE projects in their healthcare settings. For more information, please, see: www.amia.org/meetings/spring/current/info.html

International Conference on Biomedical Engineering

The International Association of Science and Technology for Development will sponsor an international forum for researchers and practitioners interested in advances in, and applications of, biomedical engineering. During the event, participants will have an opportunity to exchange their latest research, results, and ideas in the areas of medical imaging, bioinformatics, nanotechnology, new biomaterials and sensors, medical robotics, and neurobiology. The conference will take place on February 16-18, 2005, in Innsbruck, Austria. For more information, please, visit:

Features

Four AIHA Partnerships Receive International Award for Excellence in Nursing

Every profession has its history and personalities. The history of nursing is full of strong women and men who chose to dedicate their lives, skills, and spirits to those in need and to provide their patients with care and compassion. Over the centuries, the nursing profession had traveled a long, winding path full of obstacles to prove its value. In more recent decades, nursing has developed into an independent medical discipline guarding the front line of clinical practices of the highest standard and qualitative patient care while at the same time elevating nurses from being physicians' assistants to strong partners in care who equally contribute to the successful treatment of patients as well as the prestige of healthcare institutions where they work.

In the United States, the true value of high-level professional nursing has been highlighted in a number of scientific studies published over the past two decades beginning with a national study conducted by the American Academy of Nursing in 1982. This study identified hospitals that were immune to nursing shortages because of excellent work environments for nurses. Subsequent research initiated at the University of Pennsylvania School of Nursing (UPSN) with funding from the National Institute of Nursing Research evaluated hospital patient and nurse outcomes, demonstrating that hospitals with excellent nursing staffs and practices observed lower mortality and complication rates, higher patient satisfaction, more cost-effective care, and greater retention of nurses, while other medical institutions were characterized by nurse shortages and poorer quality indicators. Thus, nursing excellence was associated with better care and institutions that were able to attract and retain a highly qualified nursing workforce and to achieve better patient outcomes were identified as Magnet Hospitals.



Linda Aiken with four Journey to Nursing Excellence prizes designed for Armenian and Russian healthcare institutions. (Photo courtesy of Linda Aiken.)

The ANCC's Magnet Program has compiled a body of scientific evidence linking better patient care outcomes to the implementation of 14 key standards of nursing excellence that address both the administration of nursing services and the quality of nursing care. To receive a Magnet Recognition Award, hospitals must demonstrate that they can meet a set of defined standards for clinical nursing excellence and, indeed, all magnet hospitals show superior patient outcomes and high nurse workforce retention. Also, magnet designation helps

consumers locate healthcare organizations that provide the very best healthcare and serves as the seal of approval for high patient satisfaction. Since the launch of the program, more than 100 hospitals in the United States and United Kingdom have achieved magnet status.

Journey to Excellence

While most of the ANCC magnet experience had historically been with well-resourced healthcare systems in English-speaking countries, in 2000 the American International Health Alliance (AIHA) in partnership with ANCC created a pilot program to explore the applicability of magnet recognition standards of nursing excellence in developing countries that are characterized by chronic underinvestment in professional nursing. The project began with USAID's evaluation of all AIHA partnerships conducted in 2001. The evaluation team concluded that among AIHA's most impressive successes was the development of professional roles of nurses. Linda Aiken, director of UPSN's Center for Health Outcomes and Policy Research, who was part of the USAID evaluation team, noted that many of the graduated AIHA partnership hospitals in the countries of the former Soviet Union exhibited some of the characteristics of professional nursing she had observed and studied in US magnet hospitals. Aiken says she began to wonder if, with greater assistance from American partners, these graduated hospital partnerships could meet American standards of nursing excellence.



A magnet pilot nurse at St. Grigor Lusavorich Medical Center in Yerevan receives a Journey to Nursing Excellence Ribbon from US sister magnet hospital nurse Mary Ann Anderson. (Photo courtesy of Linda Aiken.)

Upon her return to the United States, Aiken shared these observations with three US nurses who had been the architects of some of AIHA's early hospital partnerships: Sharon Weinstein, president of Core Consulting Group and AIHA's principle nursing resource; Jane Younger, health management consultant, and member of AIHA's now graduated St. Petersburg/Louisville partnership; and Salpy Akaragian, director of International Nursing Programs at UCLA Medical Center, and member of Lori/Los Angeles and Yerevan/Los Angeles partnerships. With the support of these nursing leaders, Aiken submitted to AIHA a proposal for the Nursing Quality Improvement

Initiative (NQII) designed to move nursing programs in the original hospital partnerships beyond basic improvements to the establishment of exemplary models of professional nursing practice approximating international standards of excellence.

Headed by Aiken, the implementation of the NQII began with the selection of those institutions from among successful AIHA graduated partnership hospitals that were judged by the nurse advisors to have made significant progress in establishing professional nursing practice during the term of their partnership activities. Four leading medical establishments in Armenia and Russia—Erebouni Medical Center and St. Grigor Lusavorich Medical Center in Yerevan, Central Clinical Hospital in Moscow, and Sokolov Medical Center in St. Petersburg—were selected to replicate quality standards of the ANCC accreditation program for

nursing care excellence.

Because meeting the magnet standards would require extensive changes in these hospitals' basic approaches to nursing care, as well as their administrative and medical support of nurses, it was decided that the AIHA demonstration project would target a limited number of units in each hospital, which represents a departure from the US Magnet Recognition Program. The idea was that once these key units successfully adopted the standards, each would serve as models for the entire hospital to emulate. "Our goal was to achieve reasonable compliance with most of the magnet standards in the demonstration units leaving the roll-out to additional units to take place later," Aiken points out.

As the next step, three AIHA NQII advisors took an intensive course in methods of magnet program appraisal sponsored by ANCC. The course familiarized them with the criteria by which to judge the excellence of the individual hospital programs and provided them with the skills necessary to guide the regional institutions as they began to implement the magnet standards. "We also decided to try to recruit US magnet hospitals as partners for the Armenian and Russian sites and sent out invitations to all US hospitals on the ANCC magnet listserv," Aiken recalls. As a result of these efforts, four US hospitals volunteered for this task, which involved a commitment to send their nurses and management teams to the Eurasian hospitals and host overseas nurses at their own institutions. The resulting sister hospital relationships were created: Aurora Healthcare in Milwaukee, Wisconsin, with Central Clinical Hospital in Moscow; Robert Wood Johnson University Hospital of New Brunswick, New Jersey, and Sokolov Medical Center in St. Petersburg; North Shore University Hospital in Manhasset, New York, with Erebouni Medical Center in Yerevan, Armenia; and Wake Forest University's Baptist Medical Center of Winston-Salem, North Carolina with Yerevan's St. Grigor Lusavorich Medical Center. According to Aiken, the subsequent three years of collaboration proved the matching of the partners to be highly successful.



A nurse from the Erebouni Medical Center and Margarita Baggett, chief nurse of the North Shore University Hospital, observe a patient's history. (Photo courtesy of Linda Aiken.)



A magnet pilot nurse assists an ICU patient at St. Grigor Lusavorich Medical Center in Yerevan. (Photo courtesy of Linda Aiken.)

Speaking about the work done to ensure the overall success of the project, Aiken describes scientific evaluations of the selected sites. "In the first year of the project in collaboration with the American University of Armenia, we surveyed nurses and patients to collect detailed data on each hospital's organizational traits and outcome variables, such as patient satisfaction and nurse-assessed quality of care. After the sites qualified for ANCC awards for their progress, we collected the same types of data both in a follow-up survey and during the site visits," says Aiken, underscoring that the pre- and post-evaluations demonstrated that reports of the overall quality of care—including nursing care—had improved dramatically following the introduction of magnet recognition standards.

Discussing some of the measures that contributed to these improvements, Aiken notes that each site developed an entirely new paper record for nursing assessments, care plans, and clinical outcome indicators. In addition, all four hospitals developed a patient-centered mission statement, policies and procedures governing clinical care and nursing administration, a patient bill of rights, job descriptions for clinical and administrative nurses, and a complete record of continuing education and competency certifications for each nurse. During the site visits, it became evident that the new forms of nursing care documentation and related outcomes had begun to transform care at the bedside.

"In the beginning, the forms themselves were the focus; now the forms serve as a guide to inform care," Aiken says. In addition, nurses are now able to verbally present a comprehensive case history with a corresponding nursing care plan, and to engage in therapeutic interactions with patients, which is, she stressed, "a big change since the beginning of the initiative."

The increased role nurses are now playing in patient care at the four hospitals is evident in the number of new initiatives to restore patient privacy and improve quality of care spearheaded by the nursing staff. One of these initiatives at Erebouni Medical Center involved designing and sewing curtains to separate patients in admissions areas and intensive care units (ICUs) modeled on privacy curtains observed by the nurses during their visits to North Shore University Hospital. Another was the installation of electronic physician call systems in ICUs so that nurses do not have to leave the patient's side during emergency situations to fetch a physician as they had previously done. Other



ICU nurse at St. Grigor presents patient's care plan to her US partners Elizabeth Newton and Mary Anne Anderson, and AIHA NQII's coordinator Linda Aiken. (Photo courtesy of Linda Aiken.)

initiatives worth mentioning include the introduction of mandatory reporting forms for monitoring both patient complications and cases that required the use of physical restraints; the latter was reported to significantly reduce the instances of such restraints. The result of these and other innovations that the Russian and Armenian nurses reported was most rewarding for them was the positive response of physicians at their respective institutions who—having observed the increased contributions nurses made toward improved patient care—began seeing them as equal professional partners.



Linda Aiken pins a Journey to Excellence Ribbon on Ara Minosyan, St. Grigor Lusavorovich Hospital Director, while head nurse Ruzanna Ginosyan receives a Journey to Excellence Pin from her US colleague Mary Ann Anderson of Wake Forest University's Baptist Medical Center. (Photo courtesy of Linda Aiken.)

"The significance of this three-year project was in that it showed for the first time that Western standards of excellence could be successfully implemented in countries where nursing had been underdeveloped and where resources were not as abundant as in countries with stronger economies," Aiken says. Aiken underscored that ANCC's Journey to Excellence Award bestowed on the four demonstration sites provides strong evidence that "Nursing is truly the arch that links patient care with quality and that with a superior nursing staff you can really achieve a high standard of healthcare provision in any place throughout the world."

Acknowledging the success of the each Eurasian hospitals, ANCC Executive Director Jeanne M. Floyd underscored that "This project represents a progress of organizational self-reflection, alignment, team-building, and evolution that enabled Armenian and Russian nurses to transform their workplace and achieve higher levels of job satisfaction and patient care in an effort to make a real difference in the lives of their patients and in their communities."

Days of Glory

September 2004 was a rewarding month for everyone who worked on the three-year project, but especially for the Armenian and Russian nurses who had proven to the international community that they possessed both the determination and ability to meet high standards of nursing and healthcare despite scarce resources and the many challenges faced by healthcare systems in their countries.

That month, each participating hospital celebrated their accomplishments during gala ceremonies culminating in their receipt of ANCC's Journey to Excellence Award. The events were attended by the US magnet nurse advisors and partners, local and national health authorities, and the nurses who participated in the project, all of whom expressed warm words of gratitude and mutual appreciation.

"We are grateful for having been selected for this partnership," Patricia Johnson, chief nursing officer at Wake Forest University's Baptist Medical Center, said about their partnership with Yerevan's St. Grigor Lusavorich Medical Center. She underscored that while striving to realize the partnership goal, the US partners benefited as well: "Through the exchange of nursing knowledge and witnessing the passionate provision of quality care with limited resources we recognized that nursing really is an international language, and I am proud that we did our part to make [such a] difference in the world of nursing."



Linda Aiken hands the Journey to Nursing Excellence award to Natalia Prikhod'ko, chief nurse of the Maternity House at the Moscow CCH while Anatoliy Brontveyn, CCH's head physician, Tatiana Zapasnaya, CCH's chief nurse, Larry S. Gage, member of the AIHA's Board of Directors, and Sharon Weinstein, US advisor, look on.
(Photo: Marina Ayvazian.)

Talking about Erebouni Medical Center's "journey to excellence," North Shore University Hospital Nurse Executive

Margarita Baggett noted that during their three years of cooperation the Armenian nurses had demonstrated strong commitment to their professional development and quest to improve patient care and outcomes. At the same time, the North Shore team gained both personal and professional rewards far exceeding those inherent in the normal scope of their daily practice. "The Erebouni Medical Center may have lacked material resources but it was rich with caring and kindness. This caring atmosphere made each of our nurses remember why they chose the vocation of nursing. They were reminded that nursing is first and foremost an art based on scientific principles and that it does not depend on technology, but on caring hearts and competent hands."

Marie Golanowski, vice president of nursing at the Aurora Health Care-Metro Region which partnered with Moscow's Central Clinical Hospital, also spoke about the mutual benefits of the project. "While this project gave us a unique opportunity to explore international nursing issues, it also clearly highlighted the fact that patients all over the world have common needs," she explained. "Through our involvement, we developed a deeper appreciation of holistic health practices while also gaining a better understanding of the unique needs of our Russian patient population in Milwaukee."



Linda Aiken, Galina Orlova and Larry S. Gage share a moment after the Journey to Excellence ceremony in St. Petersburg.
(Photo: Marina Ayvazian.)

Echoing this thought, Harvey Holzberg, president and CEO of Robert Wood Johnson University Hospital, noted that US nursing staff learned quite a bit from the staff at Sokolov Medical Center through this international magnet program. "It provided an in-depth view of nursing practice with a quality international partner and the amount of change at both hospitals has clearly demonstrated positive changes for patients," he said, underscoring the US magnet hospital's intention to continue the collaboration with their St. Petersburg partners in the future.

Speaking during the Journey to Excellence ceremony in St. Petersburg, Andrew

Greene, Chief Executive Officer of Robert Wood Johnson Health Network, admitted that it gave him and his team great pleasure to share this award with their partners from the Sokolov Medical Center. "Our feelings are so deep that we brought eight people from New Jersey to participate in this ceremony where our Russian partnership institution is recognized as one of the best hospitals in the world for nursing care," Greene stated. Calling Sokolov's achievement an entry point for future victories, Galina Orlova, the institution's chief nurse, agreed, saying, "The work we've done by adopting 14 standards of nursing excellence in one of the hospital's departments has been difficult, but rewarding. We will not stop at this point, rather we will continue to perfect our skills and teach other nursing professionals at the Sokolov Medical Center so that in a few years the whole hospital can be proud of its recognition of nursing excellence."

Even though the project came to an end and all who had participated went back to their every-day routines, there is one thing that from now on will unite all the nurses from the magnet hospitals in Eurasia and the United States—a special Journey to Nursing Excellence pin that nurses wear on their uniform to show that they work in an institution that delivers excellent nursing care. These little reminders will always connect them despite the distance, cultural dissimilarities, and differences in the languages they speak because excellence in nursing is now an international concept.

Information Takes on New Value in Odessa

"Have you ever had a day that was just perfect, where everything just fit into place and you felt completely satisfied with life?" Yuri Vorokhta asks, as he begins to tell me about the achievements of the Learning Resource Center (LRC), which opened at the Odessa State Medical University (OSMU) in 1999 under AIHA's Odessa/Boulder partnership and where Vorokhta is information coordinator. When I answer in the affirmative, he nods with satisfaction, as if to say that we would be able to understand each other. "I feel as if the period during which we have been working with AIHA, [from 1999 to 2004,] has been one long, bright day! A day when everything works out, when a great number of successful meetings and interesting contacts occur, and when you understand that you've managed to accomplish quite a lot!" he says with passion.



Yuriy Vorokhta (Photo courtesy of Irina Carnevale.)

Vorokhta is an extraordinary person, although he himself says there is nothing special in his professional biography. "The usual range of things for med college graduates," he laughs, commenting on his background. Before entering OSMU to study medicine, he worked as a male nurse in the neurology department. As a student, he earned money as an emergency medical technician. Receiving his MD in 1997, Vorokhta stayed on at OSMU in the general hygiene department as an epidemiologist. And he has worked there ever since, enriching the ordinary practice of medical science with fresh discoveries and new information technologies. How has he done this? Vorokhta explains with the emotion of someone who derives genuine pleasure from his work.

"Quite simply, I really lucked out," says Vorokhta, recalling how he first got involved in information technology (IT). "It happened in 1999, after OSMU and Boulder Community Hospital [in Colorado] signed a memorandum to continue bilateral cooperation and I was asked to work as volunteer information coordinator for the partnership. I knew a little about the LRC at the Odessa Oblast Clinical Hospital, which had been opened under another AIHA partnership—Odessa/Coney Island—in 1996, so I immediately agreed. But it was only at the seminars for information coordinators that I realized just how much I had lucked out." Vorokhta says that at those meetings he not only came to really understand the true value of information in general, but also learned how to use it intelligently. In addition, he learned what he needed to know in order to teach others.

A Source for Alternative Ways of Thinking About a Patient's Health

The Odessa LRC Vorokhta directs has three computers with Internet access, a printer, and a scanner that can digitize medical images to be used in teleconsultations, but according to Vorokhta, the equipment's role is only ancillary. "What we really have is an enormous array of medical libraries and databases on medicine and healthcare at our disposal. Included are Medline, PubMed, Health InterNetwork Access to Research Initiative (HINARI)." The latter provides online access to the full texts of scientific articles. Vorokhta says that these articles would normally cost \$20-30 each, putting them beyond the reach of many healthcare professionals. Now, however, LRC users can read scientific material, following the author's train of thought from the first line to the last,

instead of just relying on an abstract. Vorokhta believes that this is extremely important for medical specialists because it gives them a complete picture of a given problem, enabling them to use new, more progressive methods in their practice.

Continuing on this vein, Vorokhta emphasizes that "overall, the LRC is a very important tool for changing the way people who work in healthcare think because it gives them an opportunity to learn to make the maximum use of existing information resources, both for themselves and for the people around them." With that end in view, the LRC holds classes for OSMU faculty and students, as well as for doctors and nurses from the University's clinics. During these educational sessions, LRC instructors help others learn to use online and electronic resources. As Vorokhta notes, these skills are fostered with an ulterior motive—namely helping patients. "Once specialists get a sense that they do not have to go to libraries or pay money to get more information and learn that they can access it themselves through resources available in LRC, they are more inclined to work to master new methods, educate themselves about modern technologies, and use what they learn in their medical practice. When they do, their patients benefit."



Yuriy Vorokhta explains the principles of effective on-line research to senior OSMU students and a family physician from the neighboring outpatient clinic (on his right)
 . (Photo courtesy of Yuriy Vorokhta.)

Vorokhta says that the LRC's most interesting and rapidly developing area of work is in the area of evidence-based practice (EBP). Using this technique, physicians gather data on the most effective diagnostic, treatment, and preventive methods for a given illness rather than relying solely on traditional protocols. Vorokhta admits that the Odessa medical community still has mixed attitudes about this method, but that those who have mastered it are pleased with the results of their work. With some satisfaction, Vorokhta quotes doctors who, after studying at the LRC, have implemented EBP in their practice by saying: "My efficiency has improved

because I pay less attention to untested methods. ... More patients come to me because they've heard that my treatments are better than those of other specialists."

Information from advanced technologies is also being introduced to medical students. Recently, elements of evidence-based medicine have been included in the under- and post-graduate curricula used for training family physicians. LRC staff initiated this innovation, along with specialists from the City Family Medicine Center, another institution established through the Odessa/Boulder partnership. Vorokhta says that the instructors quickly became convinced that evidence-based medicine is what most caught the students' interest, which does not surprise him. After all, he explains, "it is more pleasant to use already validated methods than to wander around among the infinite expanses of theories and hypotheses."

"In addition, professors themselves visit our center, to work on lectures,

dissertations, and abstracts, and we see how they incorporate the different elements we teach here into their work later on," Vorokhta remarks. As a result, OSMU's epidemiology and hygiene curricula have been altered and students are now given information about state-of-the-art research methods and equipment, as well as hygiene protocols and standards used abroad.

"Another interesting area we are developing is meta-analysis," Vorokhta continues, stressing that "this method is considered the evidentiary gold standard, the most reliable, in medicine." He explains that meta-analysis is a method of synthesizing statistically similar sets of clinical research results and analyzing them as if they come from a single study. With the advent of this method the traditional review of scientific literature is done through a strict mathematical procedure. "This method helps the specialist evaluate the validity of a chosen preventive approach or treatment option and thus allows him/her to save time and money, which is often wasted on trying out different treatment options that do not ultimately benefit the patient."

While the typical OSMU LRC user is an OSMU clinician, instructor, or student, if a doctor or nurse from any of the city's other institutions wants to use the facilities they are most welcome. "The LRC provides instruction in response to our users' needs. If somebody needs particular information and he can find it himself, he needs to sign up, picking the time in our schedule that's convenient for him," says Vorokhta, explaining that a sign-up system was instituted because presently the LRC can only provide a maximum of 100 hours of access each month to its three PCs, which is not always enough time to satisfy the needs of everyone who seeks instruction.



This young neuropatology physician, a recent OSMU graduate, is one of the LRC's customers. (Photo courtesy of Yuriy Vorokhta.)

For those who do not want to perform searches themselves, the LRC staff will find the information. "We get 50 to 150 such requests each month, says Vorokhta. "The greatest number of them comes from OSMU students at the start and near the end of the school year. In addition, we provide special instruction to train teachers from different medical and educational institutions in information technology. As far as I know, these specialists are now teaching people at their own organizations so they're continuing what we started here."

Moving Forward Without the Partnership's Support

Despite the end of AIHA financing and the graduation of the Odessa/Boulder partnership, the LRC is continuing its previous mode of work. "I am grateful to AIHA for having given us the opportunity to develop our information technology skills and capacity, which we now can do independently," says Vorokhta. "What's more, we are planning to reach out beyond the university, and replicate our model at other organizations in the region."

—Unless otherwise noted, all stories in this issue are written by AIHA Staff Writer

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