

LRC Highlights October-December 2003

AIHA information coordinators recently reported the following activities and accomplishments in their monthly activity reports for the Learning Resource Center (LRC) project.

If you would like more information about any of these highlights, please contact the information coordinator at the partner institution. The e-mail addresses of all AIHA partnership information coordinators are available on AIHA's Web site.

LRC Highlights are meant to demonstrate the impact of access to health information, not the effectiveness or otherwise of different treatments. The content is anecdotal and is **not** intended as a source of reliable health information in itself. Healthcare providers are advised not to change practice on the basis of anecdotal material. Healthcare providers should consult evidence-based textbooks, guidelines and systematic reviews before making any changes in practice.

For more information about AIHA's Learning Resource Center project, please see AIHA's Web site at www.aiha.com/index.jsp?sid=1&id=1280&pid=4739 or contact Mark Storey, AIHA Program Officer for Information and Communication Technology, at mstorey@igc.org.

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Application of Evidence-Based Practice (EBP)

[Note: In order to promote the principles of evidence-based practice, all LRCs are required to regularly conduct "Practice Standard Reviews" (PSR) in which they evaluate the available evidence for a particular clinical intervention, health policy, or educational method. For more information on PSRs, please see: <http://www.aiha.com/index.jsp?sid=1&id=7992&pid=7976>]

In an effort to overcome the old scourge of polypragmasy, the staff of the Cardiosurgery Center at the Republican Clinical Hospital in Chisinau, Moldova, have updated their standard practices for surgical and post-surgical prophylaxis. Learning from the international experience and evidence-based literature, the staff replaced three standard antibiotics with one. In the cases of postoperative complications, culture and sensitivity tests are used to determine appropriate drug treatment. In the six months following the implementation of the new procedure, the staff noticed a decrease in the number of complications and a reduction in the patient hospital stay. The economic effects have also been significant.

At the Primary Healthcare Directorate of Lezha District in Albania, ten physicians who are also the members of the LRC staff have formed a Committee that works to review, formulate and help implement evidence-based practices at the district institutions. The Committee is divided into two groups of five people. The first group includes staff working at the Primary Healthcare Directorate whose responsibility is to review standards and oversee implementation of these standards at the primary healthcare level. The second group works at the Hospital Directorate and conducts similar activities at the secondary healthcare

institutions. In 2003, the Committee used AIHA's PSR methodology to review the standards for the treatment of anemia during pregnancy. The reviewers concluded that early detection is one of the most important steps in the treatment of anemia because of improved health outcomes and significant cost effectiveness. The Committee recommendations also provide guidance on the therapy options for mild and severe cases of anemia during pregnancy. Following this review, the LRC staff developed instructional materials and both groups began to work with Lezha district physicians on implementing improved diagnostic and treatment procedures for anemia. The Committee members are also planning to collect data in 2004 to track the impact of practice changes on patient outcomes.

In an effort to update institutional algorithms for the treatment of anaphylaxis—a severe life threatening systemic allergic reaction that can affect all age groups,—the staff of Hospital #2 in Vladivostok, Russia, looked at the current evidence for the use of adrenaline (epinephrine) in anaphylaxis, including its safety, method, and timing of administration. The physicians found out that intramuscular adrenaline is the first line treatment for anaphylaxis, with intravenous adrenaline reserved for unresponsive anaphylaxis or circulatory collapse. Research showed that early use of adrenaline is associated with improved outcomes. In addition to updating the hospital algorithms, the physicians also emphasized the need to improve education of both patients and physicians on the use of and indications for adrenaline auto-injectors.

A team of physicians and the LRC staff from the Kharkiv Oblast Student Hospital in Ukraine has been collaborating with several primary healthcare (PHC) clinics to implement guidelines on the treatment of acute bronchitis, ulcer, and bacterial vaginosis. The results of the three-year implementation of clinical practice guidelines on acute bronchitis at seven PHC clinics showed a decrease in hospitalization rate from 29% in 2000 to 3% in 2003. Over the same period of time, physicians were able to reduce the usage of unnecessary antibiotics. Similarly, the hospitalization rate for patients with ulcer at six PHC clinics in Kharkiv dropped from 43% in 2000 to 0% in 2002. The implementation of new bacterial vaginosis guidelines at two PHC clinics led to the implementation of new diagnostic tests, which helped to reduce the length of time for the diagnostic and treatment procedures at the clinics.

Together with the staff of the Women's Wellness Center, the Information Coordinator at the Mirkasimov Republican Clinical Hospital in Baku, Azerbaijan, prepared a Practice Standard Review on the effectiveness of cryotherapy for the treatment of precancerous cervical conditions. Such treatment methods are new for the hospital physicians. The US partners from Houston recently purchased a cryotherapy apparatus for the Women's Wellness Center, which is the only equipment of its kind in Azerbaijan. The results of the literature review showed that cryotherapy is highly effective for the treatment of cervical dysplasia, squamous cell intraepithelial lesions, and subclinical human papillomavirus (HPV).

Based on the results of a Practice Standard Review conducted by the staff at the First Tashkent State Medical Institute in Uzbekistan, the staff of the physical therapy department are making changes to their acupuncture practices for the treatment of bronchial asthma. The results of the review are helping physicians to examine the effectiveness of acupuncture and to follow specific indications and contraindications for its use in bronchial asthma patients. Previously, acupuncture was often prescribed unnecessarily, sometimes in place of basic therapy, leading to prolonged treatment and complications.

In collaboration with the staff of the Center for Evidence-based Medicine at the Siberian State Medical University, the LRC staff at the Central Rayon Hospital in Tomsk, Russia, organized thirteen EBP workshops for healthcare professionals in the Tomsk region. Five workshops were conducted at the main LRC site, and eight more seminars took place at the "mini-LRCs" in the villages of Svetly, Oktyabrsky, and Loskutovo. Following this introductory training on evidence-based medicine, the Information

Coordinator is planning to conduct follow-up sessions on Medline searching and develop a handout on on-line EBP resources for workshop participants.

The recommendations of the Practice Standard Review on the management of hypertensive crisis in the primary health care settings by the staff of the Health House in Gjilan, Kosovo, have been incorporated into the Kosovar Guidelines on Arterial Hypertension. These guidelines represent the first medical protocol developed in Kosovo.

LRC Outreach Into the Community

The LRC at the Krai Clinical Hospital in Stavropol, Russia, has recently organized a high-profile Open House that was attended by the Minister of Health of the Stavropol region, Sergey Vardosanidze; the head of the Russian branch of the Cochrane Collaboration, Vasily Vlassov; several department heads from the Stavropol State Medical Academy; chief physicians from other city hospitals; Ministry of Health officials, and hospital staff. The main theme of the Open House was the application of evidence-based principles in medical practice. In addition to the wide dissemination of information and resources on evidence-based practice (the event was attended by close to 200 people), Vasily Vlassov distributed his well-known book "Introduction to Evidence-based Medicine." Vlassov also donated to the LRC the 2002 issue of the Russian edition of the Clinical Evidence and his book "Medicine in Resource-poor Environments." Lastly, an agreement was reached to provide training to the hospital staff by the members of the Russian Interregional Association of EBP Specialists, and Vlassov has made plans to conduct a week-long site training on evidence-based practice for chief physicians of the Stavropol region.

The *Journal of Central Asian Health Service Research*, a publication of the Kazakhstan School of Public Health in Almaty, has been made available on-line at <http://journal.ksph.kz>. Aiming to disseminate knowledge across traditional disciplinary boundaries, the Journal promotes systems thinking and provides a single forum for researchers and practitioners of public health, health care services, and management to exchange ideas and elucidate important developments. To date, four issues of the Journal have been published and posted on-line in PDF format.

Using disaster medicine and first aid materials from www.emsvlad.ru and other Web sites, the LRC staff at the Schuche Rayon Hospital in Kurgan region, Russia, played an active role in the annual nuclear disaster preparedness training. The information, delivered as a presentation along with paper handouts, helped physicians to review the steps for teaching first aid techniques to the general public.

To help the staff of the Microbiology and Epidemiology departments to learn more about the use of meta-analysis in medical research, the Information Coordinator at the Institute of Public Health in Tirana, Albania organized several short information and training meetings. Through active discussions and the use of meta-analysis materials available at the LRC, group participants helped each other to master the practice.

Electronic dissemination of information and resources to regional healthcare institutions is part of an ongoing routine for the LRC staff at the Kyrgyz State Medical Academy Medical Center in Bishkek. In recent months, using an electronic mailing list, the Information Coordinator provided family physicians throughout Kyrgyzstan with a number of resources on evidence-based medicine, including postings from the *Global Family Doctor Daily Alerts*, POEMs (Problem Oriented Evidence that Matters), articles from the *Lancet* journal, and other materials. The LRC staff also help regional physicians with literature searches. For example, a physician from Naryn recently received information on chronic nephrological conditions, hepatology, and upcoming conferences and seminars in public health.

LRCs as Health Promotion Centers

On December 1, 2003, in observance of the World AIDS Day, the staff of the City Hospital #25 in Donetsk, Ukraine, organized an educational awareness session for the public. The LRC staff prepared brochures and a bulletin on HIV/AIDS prevention, which were distributed to the public by the staff of the Women's Wellness Center and Miners' Health Center. Over fifty members of the public attended the event and learned about prevention and treatment of HIV/AIDS. The LRC staff regularly develop educational brochures for the public, the most recent of which include pamphlets on mushroom poisoning, hepatitis C prevention, and youth smoking prevention.

With the help of the Internet and educational resources available at Polyclinic #36 LRC in Minsk, Belarus, a group of pediatricians developed a curriculum for the Bronchial Asthma School for children. The Internet resources also helped to prepare a variety of practical sessions for the little patients.

The LRC staff at the Korsakov Central Rayon Hospital on Sakhalin Island, Russia, regularly develop educational materials that are widely disseminated to the patients and the public. In the last months of 2003, they produced and distributed patient education brochures on the following topics: sexually transmitted infections, thyroid diseases, hepatitis B and C, cardiac health, nutrition during pregnancy, nutrition for patients with arterial hypertension, and nutrition for the elderly. They also developed a checklist for parents called "Risk Factors and Prevention" and an educational poster for the obstetric department entitled "Nine Months."

In support of the newly established Hypertension and Diabetes Schools for patients and their families at Pereyaslavka Rayon Hospital in Khabarovsk Region, Russia, the LRC staff are using the Internet to find educational materials for trainers and the patients. Several Russian-language Web sites have provided a breadth of resources on individual, group, and self education in diabetes and hypertension.

Promoting LRC / Partner Sustainability

In December 2003, the National Information Learning Center in Tbilisi, Georgia, has opened an IT classroom that will provide training on software development and Web design using curriculum developed by Homecom Communications (Atlanta, GA, USA). The company also donated five computers for the new classroom. The classroom was opened in the honor of late Dr. Archil Kobaladze, the coordinator of the original Tbilisi-Atlanta partnership. The Minister of Health, Rectors of the Tbilisi State Medical University and Georgia Technical University, American partners, and other dignitaries attended the opening.

In 2003, the Jessenius Faculty of Medicine at Comenius University in Martin, Slovakia, received several grants from the World Health Organization for smoking cessation research and activities in Slovakia. The Global Youth Tobacco Survey, the Global School Personnel Survey, and the development of a brochure with prevention guidelines on youth smoking in Slovakia were conducted with active participation of the LRC staff. Some funds from these grants have helped to cover expenses for computer and other equipment upgrades at the LRC.

To cover the basic costs of LRC maintenance, LRC staff at Hospital #2 in Vladivostok, Russia, has recently begun to charge fees for literature reviews, reference search and other information services.

In 2003, the Republican Clinical Hospital in Chisinau, Moldova, received 80 units of used computer equipment as part of a humanitarian aid shipment from the United Kingdom. Using these resources, the

hospital set up a classroom for the LRC with eight computers. In 2004, the LRC staff are planning to organize training courses for the hospital staff using the new equipment.

Application of Information Technology, Telemedicine, and Databases

The LRC staff at the Mirkasimov Republican Clinical Hospital in Baku, Azerbaijan, have developed a database that keeps track of thousands of optic lenses that had been donated by Carelift International to healthcare institutions in Azerbaijan. The database provides information on the distribution of lenses among various healthcare institutions and helps to monitor the inventory of available lenses. For the Republican Clinical Hospital, the database also keeps track of the number of patients and types of lenses that are being prescribed since the establishment of an optics shop, a room where glasses are assembled using equipment donated by Carelift International. The LRC staff regularly send the database by e-mail to the Carelift office, helping to determine which types of lenses are most needed. The LRC staff also translated into Azeri the user manual and training materials for the optical equipment provided by Carelift International.

As part of a long-term plan to develop automated electronic health record documentation at the Sea Port Polyclinic in Odessa, Ukraine, the LRC staff helped to implement a health information system for general practitioners and diagnostic specialists. Currently, the system includes patient records, prescription verification (drug availability at the pharmacy and selection of alternative medications), an inventory of discounted prescriptions, a listing of Port pensioners and veterans, data on Port staff and their family members (linked with the human resources database), morbidity reports, a drug index, ICD 10, occupational health checks, vaccination schedule and other features. The health information system for general practitioners is ready to function completely paper-free, contingent upon the adoption of a Ukrainian law on electronic signature.