

LRC Highlights April - June 1999

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Applications of Evidence-Based Practice

Aleksandr Dubikov at Vladivostok City Hospital No. 2 recently implemented practice guidelines developed by physicians at the Duke University Medical Center in order to limit the use of expensive anesthesia drugs when acceptable lower-cost alternatives are available. Implementation of these practice guidelines has resulted in a reduction of costs per case from \$58 to \$34, corresponding to annual savings of \$550,000.

Jarmila Potomkova of Palacky University in the Czech Republic recently helped her colleagues who are dealing with patients suffering from post traumatic stress disorder (PTSD) related to the devastating floods which occurred in the region two years ago. Her colleagues are now preparing a clinical trial involving the screening of surgical patients for PTSD using information Jarmila provided from Medline and guidelines obtained from the American Psychiatric Association's website.

In May, Alexander Meshkov from the Stavopol City Hospital No. 2 used information from the Internet and CD-ROM to compare the effectiveness of different drugs in treating patients with pancreanecrosis. After reviewing the literature, he decided on the use of the drug, sandostatin.

During the past quarter, Zhuldyz Abdrakhmanova from the Kazak Scientific Research Center of Pediatrics and Children's Surgery has been actively promoting the capabilities of the Internet and the LRC among staff. In April, she published an information bulletin focusing on evidence-based practice and the EBP resources available through the LRC. She contacted the Moscow Cnter for Evidence-based Medicine and received materials related to pediatric disabilities, infant mortality and morbidity and several other scientific reports connected to pediatrics. Zhuldyz is also coordinating with the Research Center's library to establish an "information day" each month for staff to focus on newly available resources.

Galina Sergeeva of the Institute of Oncology and Radiology in Bishkek, Kyrgyzstan, recently downloaded a useful resource from the website of the Centre for Evidence-Based Medicine in London (<http://cebm.jr2.ox.ac.uk>). The site includes an EBM toolbox, which contains Quality Filters that alert clinicians to important advances in general medicine by selecting from the biomedical literature those articles whose results are most likely to be both credible and clinically useful. It lists the Specific Criteria for Studies of Prevention and Treatment; Diagnosis; Prognosis; Causation; and Review Articles. Galina used the Quality Filters to respond to a research fellow's request for information on "Pharmacoeconomics in cancer chemotherapy." The filters helped her to find a special document on how to analyze cost-effectiveness, which was downloaded from the Evidence Based Medicine database of McMaster University. (<http://hiru.mcmaster.ca/ebm/userguid/>).

Based on information acquired from the Internet, physicians in the gastroenterology department at Central Clinical Hospital Polyclinic No. 1 in Moscow began using a new antibiotic protocol for research into the

sensitivity of H. pylori, and they are now using this protocol to treat patients. Physicians at Central Clinical Hospital have also used information from the Internet to apply a new antibiotic program for identifying Campilobacter. The new antibiotic program is now part of the infection control program for the hospital.

In June, Julia Muravievskaya from the Dubna Health Care Department participated in a working congress of the Russian Division of the Nordic Cochrane Collaboration Center. During the session, she gave a presentation about how health institutions in Dubna are using evidence-based medicine in practice.

LRC Outreach Into the Community

Svetlana Chelakh and Andrei Nabokov, from Donetsk Oblast Trauma Center, are using their website (<http://www.trauma.donetsk.ua>) as a clearinghouse for local medical resources. The website includes Donetsk Medical University, several city and regional hospitals, medical firms and other health organizations in the region. Additionally, the site lists numerous Russian-language medical resources, links to medical websites in Ukraine, Russia and the United States, as well as general medicine and traumatology publications.

Andrei Dobrescu of the University of Medicine and Pharmacy "Carol Davila" in Bucharest, Romania is working in partnership with the College of Physicians in Bucharest to provide free e-mail and Internet connectivity to physicians and students. The College's Center of Communications provides an Internet node for 45 hospitals and medical institutions in the region. Andrei has been working to create Internet mailing lists for the growing number of health professionals with e-mail addresses in order to promote greater communication and information exchange among the local medical community.

Grigory Tyapkin of Odessa Oblast Hospital recently appeared on a local television program about how physicians in Odessa are using the Internet.

To endorse the 2nd Conference on Health Promotion and Primary Prevention in Martin, Slovakia, Tibor Baska, an information coordinator from Martin Municipal Government Office, created a conference web page on his institutional website. The web page (<http://doktor.jfmed.uniba.sk/~baska/conf/conference.html>) includes the conference announcement, an electronic application form, list of topics covered at the conference, contact information for the organizing committee and other conference-related information.

Promoting LRC / Partner Sustainability

The Second Tashkent State Medical Institute has signed a contract with a local company "Nuron - DC" to create a local area network with direct Internet connectivity. The contract provides for a high-powered network server which will provide communications access to over 300 workstations at the Institute--including all departments, laboratories and clinics. The contract will also provide equipment for setting up an electronic library. Dr. Khamid Karimov, Rector of the Institute, is making the investment in order to expand the capabilities of information technology for staff and students of the Institute.

Svetlana Chelakh and her colleagues at the Donetsk Oblast Trauma Hospital in Ukraine are using their Web server to try to raise funds in order to sustain the costs of maintaining the hospital's LRC. Svetlana conducted a market analysis in March 1999 to determine the feasibility of providing Web-hosting services for local firms and organizations. In May, she began a marketing campaign to try to attract clients interested in Web design and hosting services. In June, the hospital found its first client, MedArt, a

traumatology clinic in Donetsk. The hospital has already uploaded MedArt's Website at www.med-art.dn.ua.

On March 30, M. E. Tuleutaev, the director of Semipalatinsk Oblast Clinical Hospital, issued an order "On the transition of the LRC to fee-for-service," which established the LRC as a "Computer Center" with three full-time staff. While staff at the hospital will still be able to use the LRC's services for free, outside users can now visit the LRC to perform searches on the Internet and medical databases on CD-ROM for a nominal fee. The LRC is also charging external users for photocopying, printing and other services.

In April, Evgeni Pustavalov of the EMS Training Center in Vladivostok submitted a grant proposal to the local Soros Foundation. Funding for the proposal would enable the EMS Center to provide extended training capabilities for EMS personnel throughout the Primorski Krai region.

In May, Tbilisi State Medical University won a grant to fund the University Intranet Project, which will help to connect the various departments of the University to each other as well as to the Internet.

Andrei Ureche of Republican Clinical Hospital in Chisinau, Moldova, won a grant from the local Soros Foundation to support the creation of a local area network for the hospital that would also provide Internet access to all of the departments. The majority of hospital departments are expected to be connected by October of this year.

While the National Information Learning Center in Tbilisi, Georgia is unique among AIHA's partnership LRCs in its size and scope (the NILC has been funded by several organizations, including AIHA, Soros, and the Georgian Ministry of Health, in order to serve health professionals all throughout the country), it can still provide several examples of how other LRCs can approach sustainability. The Center is currently receiving revenue from a variety of sources. The NILC offers paid monthly subscriptions for individuals who wish to use its resources. Individuals not wishing to pay monthly subscription charges can pay for specific information searches that Helen Phagava, the information coordinator, performs. Individuals seeking specific articles which are unavailable in a local library can also go to the NILC to use its document delivery services, which are supported by their US partners at the Emory School of Medicine's Health Sciences Library. The NILC, which has its own Internet server and modem server, also acts as an Internet service provider to health institutions throughout the region. Finally, the NILC provides paid training classes on computers, the Internet, and web publishing on a regular basis.

The administration of Moldova Medical and Pharmacy University in Chisinau has provided two additional computers to the university's LRC so that Oleg Lozan, the information coordinator, can create a computer classroom in order to improve Internet access and training capabilities for staff and students.

Internet Consultations

At the end of April, a one-year old refugee from Kosovo was admitted to the Clinic of Burns and Plastic Surgery in Tirana, Albania with third degree burns on the torso and gluteal region. With the support of the information coordinator from University Hospital in Tirana, the chief of the Clinic was able to contact specialists in Verona, Italy to arrange for adequate treatment. As a result, the child was treated safely in Italy and is now in good condition and on his way back to Albania. In a separate case involving a 16-year old refugee from Kosovo, a hematologist from University Hospital consulted with colleagues in Pisa, Italy regarding the treatment of leukemia. After several electronic correspondences, the patient was hospitalized in the "S.Chiera" Hospital in Italy, where physicians continued to communicate with the hematologist about the case. After two weeks, the Albanian physician was asked to send blood samples

from the patient's family members in order to determine the possibility for transplantation of spinal marrow.

In May, urologists at the Kazak Scientific Research Center of Pediatrics and Children's Surgery used e-mail to communicate with specialists from US, Turkey, Bulgaria, and Hungary to find out about surgical methods for treating hypospadias. After they were unable to find any useful information about the operation on the Internet, they asked the information coordinator, Zhuldyz Abdrakhmanova, to help them contact other specialists. Zhuldyz found a directory of e-mail contacts on the Web (<http://www.urologynet.com>) and sent out a request. They quickly received several responses and thus began an active correspondence regarding the treatment of the patient, which culminated in the delivery of several texts to assist the surgeons.

Communications And Information Exchange

Zaza Avaliani and his colleagues at Tbilisi State Medical University have begun publishing "Medical Courier," a monthly magazine consisting of articles from over 200 on-line journals. The magazine is published on-line in both English and Russian.

In May, Adam Verbik, information coordinator at the Minsk Medical Institute, published and disseminated a CD-ROM containing information on the treatment and prevention of AIDS. Over 90% of the materials included on the CD-ROM were from the Internet and Medline. In the past, Adam has published several CD-ROMs with various types of medical information and medical educational software programs. He also publishes a monthly newsletter called "Medical Networks" (in hard copy), which informs health professionals throughout the region about new information resources that are available.

Application of Information Technology, Telemedicine, and Database Information Systems

In May, Grigory Tyapkin, information coordinator at Odessa Oblast Hospital in Ukraine, created a patient record database for use by the otolaryngology department. He also created a database for a colleague who wanted to evaluate the sensitivity of microflora to antibiotics.

On April 28, the St. Petersburg Medical University in the name of Pavlov announced the opening of its new "Internet for Medicine" center. Funded in part by the Open Society Institute (Soros), the center is equipped with 10 Pentium computers and a direct connection to the Internet. The center, which is open eight hours every day, provides free and open access for medical professionals and students throughout the St. Petersburg region.

In April, the Second Tashkent State Medical Institute, in collaboration with "Infotex - XXI", a local company, created a test laboratory for telemedicine at the Central Science Research Laboratory. The laboratory will work on improving training programs and medical science through distance learning and communication. In August of this year, they are planning to initiate a project called "Telemedicine in Fergana" by setting up a similar center at the Institute's affiliate in the Fergana Valley region.

Alexei Yevtifeev from Murmansk Oblast Hospital is working with a radiologist from the city's EMS Center to create a database on radiation accidents. In a separate report, Alexei also notes that the exchange of information between the hospital and the oblast insurance fund has become much more efficient, now that they are using e-mail to transmit information.

Julia Muravievskaya, information coordinator at the Health Care Department in Dubna, Russia, is supporting the efforts of the city to evaluate the effectiveness of their diabetes training programs by assisting in the development of a city registry of diabetes patients. She also is using the U.S. Centers for Disease Control's EpiInfo software to prepare a survey for monitoring the diabetes schools.

Andrew Tooziak from the Lviv Regional Neonatology Center, in collaboration with two professional colleagues, has formed The "Panteleimon" Group, which aims to establish an on-line medical database service for Ukrainian and Russian medical and biology abstracts. The Group has already collected several thousands articles in its database and is alpha-testing an on-line version. Andrew is responsible for the layout, HTML, CSS and graphic design for The Panteleimon Project.

Arijana Pavelic of the University Hospital for Infectious Diseases in Zagreb, Croatia, has been assisting the Nursing Resource Center at the hospital in developing a database to keep track of hepatitis B vaccination. The database was created with the assistance of Dusko Jagodic, AIHA's Technology Consultant for Central and Eastern Europe, and is now being used regularly by the nurses at the center.

In April, Sergey Parmon from the Oncological Dispensary in Stavropol, Russia began using the "Oncology" software program in order to establish a cancer registry.