

LRC Highlights July - September 2000

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Applications of Evidence-Based Practice

The Institute of Hygiene, Public Health, Health Services and Management in Bucharest, Romania, has been in discussions with the Romanian Ministry of Health, the College of Physicians, and the National Health Insurance House to set up a national Evidence-based Medicine Center in Romania. The center will be referred to as the "National Center for the Collection, Systemization and Dissemination of Medical Data" and will be built upon the infrastructure and resources of the existing LRC. The information coordinator from the Institute has participated in a study tour organized by the NHS Center for Reviews and Dissemination at the University of York in the UK and has created a Web site for administrative and communication purposes for Romanian and international officials involved in the planning of the project.

Report from information coordinator at the University Hospital for Infectious Diseases in Zagreb, Croatia: "One of the leading problems in hospitals today is the irrational use of antimicrobial drugs, which leads to inappropriate, irrational, ineffective and expensive treatment resulting in numerous unwanted events such as antibiotic resistance. The largest misuse of antibiotics happens during an unnecessary treatment of viral upper respiratory tract infections, most commonly simple colds, especially in young children. In order to reduce the unnecessary use of antibiotics, doctors from our hospital have compiled guidelines (a set of diagnostic and therapeutic procedures) for the treatment of upper respiratory tract infections which are based on clinically set diagnosis of otitis, sinusitis and streptococcal angina--the only clinical syndromes which should be treated with antibiotics. These guidelines have been distributed (through seminars, continuous education courses, etc.) to other doctors, primarily family physicians. The main goal of these guidelines is to help physicians reach a quicker and better diagnosis and to teach them to rationally use antibiotics. Currently, doctors from the University Hospital for Infectious Diseases are compiling a set of diagnostic and therapeutic procedures for the treatment of acute infectious diarrhoea. In writing these guidelines the doctors are using all available evidence-based information and experiences from other institutions which they are able to obtain through the Internet."

In July, staff at Minsk City Polyclinic No. 36 used resources at the LRC, including Medline and the Web sites for WHO and CDC, to develop materials for a training course on the early detection of heart disease. Using these materials, staff at the Department of Internal Medicine divided their patients into risk groups for heart disease and identified appropriate methods for rehabilitation for each risk group, including prescribed exercise for patients with low levels of physical activity.

The chief physician at Odessa Sea Port Polyclinic in Ukraine has created a commission to develop recommendations for the transition to international quality standards (such as ISO 9000). The commission will be responsible for reviewing recommendations and for developing a workplan, which will include a methodology based on the recommendations of the Cochrane Collaboration.

In preparation for a health fair, a physician from Vanadzor Polyclinic No. 5 in Lori, Armenia, requested information on the early detection and treatment of breast cancer, including guidelines on breast self exams. The physician was responsible for conducting breast exams during the health fair and said that the information she obtained allowed her to incorporate the latest methods and techniques into her practice.

The information coordinator at the Kutaisi Women's Wellness Center decided to do a literature review on the topic of neonatal resuscitation because she felt that the treatments being used at the center were out-of-date and required a lot of expensive and potentially unnecessary medications. Using the LRC, she obtained guidelines, which staff have begun to follow with positive results. In addition to having more positive results with neonatal resuscitation, they have been able to save money on medications.

In September, the information coordinator at the National Health Management Center in Tbilisi, Georgia, found information on the Web site of the European Union of Medical Specialists about the various medical specialties for which they provide post-graduate training. This information was requested by the Georgian Ministry of Health in order to help them in their efforts to develop a similar list of medical specialties in which they plan to provide the post-graduate training in Georgia.

Using e-mail, staff at the Women's Wellness Center in Kutaisi have collaborated with their US partners in Atlanta to develop recommendations and guidelines on using the pap-smear method for screening for cervical cancer. They plan to introduce this method, which has not previously been used in Georgia, at the Center.

In July, health professionals at Donetsk Oblast Trauma Hospital have introduced clinical guidelines for nursing, which were developed by hospital staff taking into account the capabilities that exist at the hospital for patients being admitted.

In July, Kazakh television highlighted a case of a 9-year-old child suffering from progeria (premature aging). Following the story, the press approached staff at the Institute of Pediatrics and Children's Surgery in Almaty to request information about the causes of this disease. Using the resources of the LRC, the information coordinator obtained information from the Internet, which was used by staff at the Institute to prepare for a press conference and which will be used to help diagnose the patient. Information was obtained from www.1freespace.com/health/progeria/index.html; www.progeriaresearch.org; and www.progeria.org; among others.

The information coordinator at the National Republican Center for Emergency Medical Care in Tashkent helped a physician to produce information materials to give to a patient who was reluctant to agree to a necessary operation for bronchioectasis. After the patient and her parents reviewed the materials, they agreed to undergo the operation. The operation was conducted successfully, and the patient is now in good condition.

The information coordinator at Pereyaslavka Rayon Hospital and Polyclinic in Russia has been providing staff from various departments with information to help them update their treatment methods. For gynecologists, information about drug therapy for treating somatic diseases in pregnant women has led to new approaches being used to treat these conditions at the hospital. Similarly, surgeons at the hospital have started using drugs that affect the metabolism of cartilage as a conservative treatment for osteoarthritis in large joints. The information coordinator also helped a urologist find information on the use of pyrogenal and T-activin to treat chronic prostatitis.

On several occasions over the last few months, staff at the Kurgan Maternity House in Russia have used the LRC to find necessary medical equipment. According to the information coordinator, the ability to compare prices and technical specifications from various companies using the Internet has enabled the Maternity House to save a substantial amount of money and to purchase equipment with better characteristics. They have also started using the Internet to coordinate purchases of pharmaceuticals. When their US partners recommended the use of RhoGAM as part of the protocol for dealing with Rh factor incompatibility, they were able to find a cheaper, domestic equivalent. The partners are now using the LRC resources to do a comparative analysis of the characteristics of these various drugs.

Report from information coordinator at Vladivostok City Hospital No. 2: "Ischemic heart disease remains the most common cause of death worldwide. In the recent Global Use of Strategies To Open Occluded Arteries in Acute Coronary Syndromes (GUSTO-IIb) trial, 9.4% of patients died or suffered a myocardial infarction at 30 days despite vigorous medical management. We've discussed a new algorithm for risk stratification and management of acute coronary syndromes for further introduction in our hospital."

To support the health promotion efforts of the Kyrgyz State Medical Academy in Bishkek, the information coordinator conducted a search for information on reproductive health attitudes and behaviors of various population groups. This information was used to develop reproductive health recommendations that were compiled into pamphlets, which are currently being disseminated to the public through polyclinics throughout the country.

Two days after the information coordinator at Minsk City Hospital No. 36 gave a presentation to physicians about the latest methods for diagnosing and treating chlamydia, the head of one of the hospital departments came to the LRC to request help with a patient who had been suffering from and treated for polyarthritis for five years without any success or improvement. After hearing the presentation, the physician reviewed his past treatments and thought that maybe he had not properly diagnosed the patient, and had merely been treating the symptoms associated with another disease. As it turned out, the arthritis problems were a symptom of Reiter's syndrome, which is itself associated with chlamydia. This diagnosis was possible based on the information obtained from the Internet.

LRC Outreach Into the Community

Staff at the Women's Wellness Center in Iasi, Romania are using the Internet to promote healthy lifestyles among local teenagers. During regular meetings in which physicians discuss health topics with teenagers, they are discussing the capabilities of the Internet and distributing brochures about the availability of LRC services (Internet access and information requests). Physicians also give specific Web addresses for recommended Web sites which deal with teen-specific problems and issues.

The LRC at Murmasnk City Ambulance Hospital has begun providing Internet access to staff at the Murmansk Health Insurance Fund. They recently helped a specialist at the Fund to find information on new treatments for arthral hypertension.

Promoting LRC / Partner Sustainability

At the Orthopedic Hospital of Biograd in Croatia, the director asked the information coordinator to compare drug usage in the hospital with that of health providers in other countries in order to determine whether there were opportunities to cut the hospitals expenditures on expensive drugs. Using the Internet, they found data comparing "daily defined doses" at different hospitals, and the special team of staff assigned to this task concluded that while the hospital's usage of many drugs is comparable with the that

of the rest of the world, many others are overdosed. As a result of the team's report, the director suggested that expenses for these overdosed drugs should be cut over the next few months.

After establishing a relationship with health care providers in Hanover, Germany through regular e-mail communications, the Republican Clinical Hospital in Chisinau, Moldova has received from them a humanitarian donation, which will allow them to perform more than twenty heart operations.

In July, the information coordinator from Zhovkva Rayon Hospital in Ukraine helped a physician to search the Internet to find the price for a medication called Gonal-F. The prices found on the Internet were significantly cheaper than those requested by the local reseller, and thus they were able to save the patient some money on his treatment expenses.

Internet Consultations

During this quarter, a young doctor from otorhinolaryngologic department at the University Hospital Center "Mother Theresa" in Tirana asked the information coordinator to help her to contact a hematology clinic abroad about a 14-year-old patient diagnosed with Angiophybroma juvenile of nasopharynge. Through the Internet, they were able to communicate with the Onco-Hematological Clinic of the "S.Chiera" Hospital in Pisa, Italy. The physician consulted by e-mail and by telephone for over a week in order to make arrangements for treatment.

A gastroenterologist at Zadar Regional Hospital in Croatia has been using the Internet to consult regularly with colleagues in Ljubljana, Slovenia. He uses the LRC scanner to scan radiology film which is then sent by e-mail for consultation. The LRC also recently provided assistance to a physician treating a child with a rare type of poisoning. When the physicians requested help from the LRC, the information coordinator found several articles, which recommended a drug therapy. The treatment was effective, and now the child is doing fine.

Communications And Information Exchange

The Kazak Scientific Research Center of Pediatrics and Children's Surgery has uploaded over one hundred scientific research articles from two medical conferences. This includes articles from a conference on "Ecology and Health of Children" (held in June) and "Pediatric Traumatology and Orthopedics" (being held in October). The information coordinator is also working to collect and upload materials from all of the other conferences it has sponsored over the past three years. These materials are available on its Web site at www.aiha.com/english/partners/almaty/home_r.htm.

The Bishkek-Reno partnership has begun using the LRC to provide family medicine distance learning modules. The US partners in Reno send training modules on various subjects by e-mail to staff at the family medicine department of the Kyrgyz State Medical Academy in Bishkek.

The information coordinator at Korsakov Rayon Hospital and Polyclinic in Russia began publishing an LRC newsletter in July. The newsletter, which is going to be published twice a month, includes articles and excerpts providing the latest medical information on selected topics in each issue. It also announces new resources at the LRC and lists the various services (including training and information requests) available to all staff.

Application of Information Technology, Telemedicine, and Database Information Systems

Information technology has served as one of the core foundations for the model network of Centers for Disaster and Emergency Medicine / EMS Training Centers in Georgia. Shortly after the LRC was established in 1997, the information coordinator began creating multimedia training materials for the center's first aid courses. All lectures were converted to interactive, multimedia presentations using PowerPoint. Staff have subsequently begun using a more robust software tool called Macromedia Flash, which enables them to improve the interactivity of their training materials, and they intend to use these capabilities to support the development of distance learning courses using the Web site of the Tbilisi Center to provide training to the satellite centers. Also, Center staff have created a unique software tool for remote patient consultations. This software allows EMS personnel at any of the EMS Centers in the country to create and transmit a patient record electronically and then use a consultation service, which they have named TelCoNet, to correspond with other EMS specialists in the country.