Family Medicine in the Russian Far East

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Background and Objectives: Over the last decade, Russia and other former Soviet states have attempted to move from a fragmented health care system dominated by specialty and hospital care to one emphasizing primary care and prevention through the introduction of family medicine. This report describes the development of family medicine in Russia’s Far East region. Methods: The Far East was one of the first places in Russia to develop family medicine education. Early interaction with the United States and adoption of an American training model allowed rapid development of the training program. The Russian Ministry of Health issued a health order in 1992 to transition the organization of primary care in Russia to a family medicine model. Results: There are now 15 family medicine training programs in Russia, with several now established in the Far East. Introducing family medicine effectively into an “entrenched” medical system that does not reward prevention has proven difficult for reasons including lack of funding and training that does not fully prepare physicians for practice in their geographic area. Conclusions: Family medicine training has been developed in the Russian Far East with some success, but a number of challenges still remain.

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The Far East region of Russia was the first area of Russia to develop family medicine training. The history of this development offers an interesting case study of the process of change in Russia and highlights a number of challenges faced in developing a new specialty.

Health Care in Russia

Russian health care faces a number of challenges, many left over from the Soviet system. Health care expenditures are low and, despite formal support of primary care, 80% of expenses go into hospital medicine. Students choose between adult medicine, pediatric medicine, or public health early in their training and then practice in a specialty system in which care is based on disease.1 About 55% to 60% of deaths in Russia are caused by cardiovascular disease; 40% of adults have hypertension, only about 10% of whom have adequately controlled blood pressure; and 65% of adults smoke. Life expectancy for males is less than 60 years and has actually shortened through the 1990s. The Russian population is declining as deaths exceed births.

The need for better training in primary care and prevention was recognized over a decade ago, and the Russian government decided to adopt a strategy to reform the old fragmented system of care by introducing principles of family medicine, particularly as practiced in the United Kingdom and the United States. In 1992, the national Ministry of Health issued Order #237, “About gradual transition to the organization of primary medical care according to the principles of family practice.” This order established family medicine as the preferred approach to primary care and called for adoption of this model nationally, recognizing that different regions of the country would move with different speeds.

There are now 15 family medicine training programs in Russia. Table 1 shows the location, number of graduates, and years in existence for 14 of these programs;2 data are not available for one program (Volgograd).

Methods

Family Medicine in the Russian Far East

The Far East is one of 11 administrative regions of Russia, stretching inland from the Pacific Ocean. It has an area of approximately 2.4 million square miles, about two thirds of the area of the United States. With a total population of 7.4 million people, it has a low population density of about three per square mile. Nonetheless, the population is 76% urban. The two

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largest cities, Vladivostok and Khabarovsk, each have between 600,000 and 700,000 people. There are two medical schools in this region, each in one of the two large cities. A map of this region is shown in Figure 1.

Interest in family medicine began at the Far Eastern State Medical University (FESMU) in Khabarovsk, well before the national mandate. In the 1980s, one of the authors (VB), a faculty member in the outpatient department of FESMU, became interested in the principles of family medicine through reading professional literature, mainly from the United States. He arranged to spend several months at the Department of Family Medicine at the Oregon Health Sciences University and at a private practice in Alabama, observing and participating in education and practice.

In 1991, the rector (equivalent to the dean) of FESMU (BK) agreed to develop a family medicine clinic and training program, with VB as chair. Together, they assembled a task force of internists, surgeons, obstetrician-gynecologists, and later a pediatrician. This group reviewed patterns in family medicine training internationally and identified the resources needed to implement a family practice residency in Khabarovsk. The release of Ministry of Health Order #237 reassured the group that they were on the right track.

Results

The first residents, five in number, started on September 1, 1992, making this one of the first programs in the country. Three residents were faculty members at FESMU in internal medicine undergoing retraining, and two were recent graduates of the FESMU. This first group of trainees formed the core of the faculty of the new program. The program now has 53 graduates, the majority of whom are in practice in the city of Khabarovsk. The program has been modified to conform to the national standards for family medicine training.

The program has also served as a model for the organization of family medicine services in the region. Patients are evaluated first by a nurse, then the physician. Laboratory and imaging tests are available, and there is extensive use of diagnostic ultrasound. The range of services is the greatest of any of the training centers. The center is attempting to educate its service population that home visits are less efficient than clinic visits in obtaining a correct diagnosis. Philosophically, population-based medicine, prevention, and patient education are strongly emphasized. A computer network was introduced into the center in 1997 that is used for appointments, disease registries, tracking preventive services, and utilization data.

Table 1

<table>
<thead>
<tr>
<th>Location</th>
<th>Total # of FPs Trained (Annual Average)</th>
<th>Years Center Has Been Established</th>
</tr>
</thead>
<tbody>
<tr>
<td>St Petersburg Medical Academy for Postgraduate Studies</td>
<td>520 (104)</td>
<td>5</td>
</tr>
<tr>
<td>Moscow Medical Academy</td>
<td>320 (32)</td>
<td>10</td>
</tr>
<tr>
<td>Perm</td>
<td>147 (18)</td>
<td>8</td>
</tr>
<tr>
<td>Tyumen</td>
<td>140 (20)</td>
<td>7</td>
</tr>
<tr>
<td>Chuvashia</td>
<td>120 (60)</td>
<td>2</td>
</tr>
<tr>
<td>Stavropol</td>
<td>117 (29)</td>
<td>4</td>
</tr>
<tr>
<td>St Petersburg Mechnikov</td>
<td>60 (5)</td>
<td>12</td>
</tr>
<tr>
<td>Arkhangelsk</td>
<td>56 (9)</td>
<td>6</td>
</tr>
<tr>
<td>Khabarovsk</td>
<td>53 (5)</td>
<td>10</td>
</tr>
<tr>
<td>Chelyabinsk</td>
<td>40 (8)</td>
<td>5</td>
</tr>
<tr>
<td>Astrakhan</td>
<td>29 (4)</td>
<td>8</td>
</tr>
<tr>
<td>Kazan</td>
<td>25 (25)</td>
<td>1</td>
</tr>
<tr>
<td>Yaroslavl</td>
<td>18 (3)</td>
<td>7</td>
</tr>
</tbody>
</table>

* Data through 2002.²

FP—family physician

Figure 1

The Russian Far East
center has developed a computer program that allows the family physician to enter the patient’s demographics and risk factors and develop an individualized program of health maintenance.

The program’s research endeavor has focused on descriptions of the organization of new family medicine services, analysis of utilization of services by family physicians, risk factor analysis, and use of diagnostic modalities, such as ultrasound, in screening and prevention. Contacts with American family medicine have continued, through direct exchange of faculty with East Tennessee State University and consulting visits sponsored by the Eurasian Medical Education Program of the Institute for Health Policy Analysis in Washington, DC.

Content of Training
Contact with American family medicine allowed for development of a training program in Khabarovsk based on many principles of American training. However, local circumstances and medical customs have produced a method of training unique to the Russian experience. The course of training is 2 years. It involves seeing patients under supervision in the family practice center, plus a lecture and conference series, and time spent in specialties.

First-year residents begin with a month in the family practice center, during which they are introduced to the process of outpatient care and learn about the operation of the center, diagnostic tests available, and the data collection programs in use. After this orientation month, the resident sees patients three half days a week in the center, as well as two nights and one 24-hour shift. Each resident meets with a faculty member to discuss patients at least once a week.

After the orientation month, residents begin their rotations in specialties. Each resident works under the supervision of an attending specialist as well as a family medicine faculty member, with whom the resident meets at least three times a week. The resident submits a weekly report in his or her activity during the rotation. About 20% of the specialty time is spent in internal medicine and a similar percentage in pediatrics and in obstetrics and gynecology, with lesser amounts of time in surgery, neurology, and other areas.

Conferences occur on Saturdays. Two days each month are devoted to lectures on subjects of relevance to family medicine. One day is spent discussing interesting cases, and one focuses on clinical and organizational issues. Prevention is taught in the family practice center, in the formal curriculum, and through direct patient care.

Obstetrics training is a problem in that the program is only 2 years long, and the birth rate in Russia is low. Consequently, graduates are not expected to be able to provide obstetric care. The faculty has identified neurology and infant care as other areas of educational concern.

The residents may experience anxiety and doubt regarding their career choice, especially during the first 4 to 6 months. Dropouts usually occur during that time. Senior residents and faculty provide an active support system.

Expansion of Family Medicine
Family medicine is well established in the city of Khabarovsk. The residency training program is 15 years old, and more than half of its graduates have entered practice in the city. The current challenge is to replicate this model throughout the Russian Far East.

The Khabarovsk Family Medicine Center plans to open a rural satellite in an area of the krai (territory) with a large population of indigenous people. The neighboring Jewish Autonomous Region (JAR) has sent several practicing physicians to Khabarovsk for retraining. The JAR physicians spend a 6-month block at the Khabarovsk center, after which they return to the JAR practice as family physicians. They are scheduled to do four such blocks to match the length of the 2-year training program, but at this time no one has completed this full program. These physicians have seen only adults or only children for many years, and after the 6-month program are expected to see patients of all ages. Many feel poorly prepared for this challenge and poorly supported in their practices; they are anxious and even bitter about the change. The JAR government would like to develop its own training center in the capital city of Birobidjan. There are some newly trained family physicians with an interest in establishing training programs in both Sakhalin and Kamchatka.

Discussion
The Russian government chose to make a major change to a family medicine model as opposed to a more incremental program of reform of the existing system. The process has involved improved training, and retraining of existing physicians, to provide primary care and prevention and greater integration of the primary and secondary care systems. This decision has provoked controversy, especially since some of the impetus for it came from funding agencies in the West. There is a real question about the ability to make incremental changes in the existing entrenched system. However, pursuing radical reform within a larger medical education system that emphasizes in-patient training, a reimbursement system that does not reward prevention, and a primary care sector that is poorly funded and places excessive time demands on physicians make it difficult to create or maintain an effective system of primary care. Graduates may experience demoralization as they are unable to put their training into practice or may stay clustered near their training program with limited im-
impact on the population as a whole, as has happened so far in Khabarovsk.

The problems experienced by limited practitioners in the JAR retrained to provide care for all ages illustrates another flaw in the whole-hearted acceptance of the family medicine model. Exclusion of obstetrics from the content of training may be a reasonable decision but leaves the issue unresolved as to who will provide obstetric services as family physicians move into more rural areas.

American family physicians will support the concept of introduction of the specialty of family medicine into countries that need better primary care and preventive services. Adoption of the American model in Russia has allowed for rapid development of training and some influence on practice in areas like the Russian Far East.

However, the unique history and different customs of health care delivery make unselective acceptance of the American model problematic. Nonetheless, the advances that have occurred in the Russian Far East and many other former Soviet states are remarkable and speak well of the efforts of both Russian physicians who have embraced principles of family medicine and the many American family physicians who have aided them.

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REFERENCES