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Medical Education in the Baltic States and its Relevance to Postgraduate Training in the United States

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Abstract: Medical education and postgraduate training in the Baltic States is substantially different than that in the United States and Canada. Cultural diversity, equivalence of training, and new technologies are major factors in clinical competence. The internet and funded exchange programs will be important in the improvement of medical education in the Baltic States.

As a Fulbright Scholar in Lithuania and Latvia from January to June 2003, the author was involved in medical education and had extensive interaction with multiple faculty members in several academic institutions. This manuscript is based upon those observations and teaching experiences.

Since the dissolution of the Soviet Union 15 years ago, most U.S. postgraduate medical residency programs have seen a rapid increase in applications from individuals who have attended medical schools in the Baltic States (Lithuania, Latvia, Estonia).

Medical education in the Baltic States is quite different from that in the United States and Canada.[1] Students enter medical school directly from secondary school without a baccalaureate degree or exposure to a diversified arts and sciences curriculum which is routine for North American students.[2-4] Thus, students are younger, less mature and culturally disadvantaged when they start medical school. Additionally, admission to medical school is based on exam scores or political/monetary influence, or both, the result being a wide spectrum of intellectual abilities and educational backgrounds in the medical school class.

In the Soviet paradigm, the medical school curriculum is six years in duration. Foreign students are granted admission, but must pay significant fees amounting to $5,000 USD per annum. For native students, tuition is either free or very inexpensive, heavily subsidized by the government.[3] Many students are awarded stipends in addition to free tuition. Most students do not have enough money to purchase medical textbooks. Therefore, much information is gained via the internet, loaned books, or library study.

The first three years of medical training are devoted to basic sciences and laboratory medicine. Teaching is generally not on par with Western standards. A professor may lecture only on his/her narrow area of interest, ignoring most of the relevant subject matter in the field. Most lectures are subjective, not evidence or literature based. Nonetheless, bright and motivated students manage to acquire necessary basic competence despite professorial detractors, although no statistics on ECFMG pass rates are available. Students are required to pass institutional examinations before proceeding to clinical training.

The next two years are hospital-based tutelage with patient care responsibilities, didactic lectures, and some outpatient exposure.[3] The final year of medical school is termed *subordinatura*, in which students may elect to spend one year in internal medicine, surgery, or obstetrics/gynecology.[1] After successful completion of the *subordinatura*, a doctorate in medicine (M.D. equivalent) is awarded. (Figure 1) Many graduates are competent in the factual knowledge of medicine, but lack the personal attributes necessary for an optimal doctor-patient relationship.

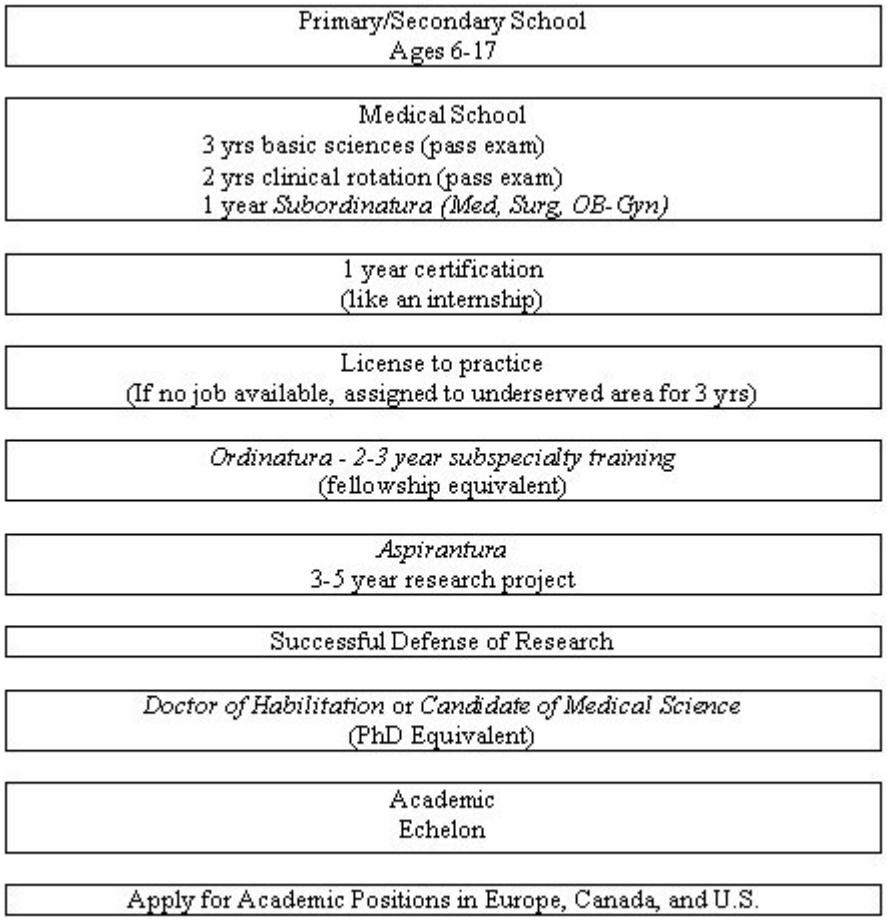

Figure 1

The knowledge and experience of physicians with new pharmaceuticals is inadequate. High pharmaceutical costs mitigate against the use of new drugs. Consequently, physicians may not be familiar with drugs that have recently entered clinical medicine. The author witnessed the use of Celebrex® (arthritis drug) as an antibiotic (like Keflex®) simply because of the ending of its name. This has the potential to cause significant patient injury.

In order to practice medicine, many hospitals require an additional year of service with concomitant certification.[1,3] The physician is then free to practice medicine if a position is available. If there is no position available, the newly certified physician must serve in a designated place of need, most commonly a three-year obligation, often considered payment for the free or subsidized medical education that he/she has received.

Physicians who wish to subspecialize or pursue an academic career must apply for an *ordinatura*, a two- to three-year subspecialty training program similar to subspecialty fellowships in the United States.[1] Most *ordinaturas* are located in urban medical institutes and have no central accrediting overview. Successful completion of the program confers the same stature as a board-certified subspecialist in the United States or Canada, although no certifying examination is required. Procedure-oriented subspecialty programs (i.e., gastroenterology, cardiology) often suffer from lack of instruction and quantities of procedures. Despite new equipment donations from the European Union,

inadequate training (or complete lack thereof) often results in incorrect applications of new technologies.

In order to obtain higher credentials, or to advance academically, physicians may pursue an *aspirantura*.[1] This is a three- to five-year research project is published as a small booklet, and defended publicly as a thesis in the presence of a scientific counsel. Publication of the scientific work in a peer-reviewed journal (preferably in English) is mandatory. With successful defense and publication of the thesis, the physician is awarded *Candidate of Medical Science* or *Doctor of Habilitation* by the federal government, roughly equivalent to a Ph.D. in the United States.

After a long and arduous educational experience, the young physician may find no reasonable employment opportunity. Low-paying positions in undesirable locations are usually available, but reimbursement is tantamount to that of a school teacher, barely over sustenance.[5] While no statistics are available, it is estimated that ten to twenty per cent of newly certified physicians seek employment outside their country, where wages are higher and advancement is more likely. Most would like to emigrate to the U.S., but the process can be difficult even for very talented and well-published academicians. Those who remain in government-funded positions in their native country usually work one or two additional jobs to make ends meet.[5]

There are several ways that Western academicians could positively influence medical education in the Baltic States. First, we could publish medical information, textbooks, and journal articles on the internet. Resourceful students and faculty will always find a way to access them. Secondly, the Fulbright and other organizations could be approached to increase their funding of exchange programs for students and faculty. Western faculty could travel to the Baltic States and give 20-30 lectures over a 2-3 week period to stimulate interest and update information as a combined work/vacation junket.

Medical education in the Baltic States is different from that in the United States and Canada. Individuals may lack cultural diversity, maturity, and other attributes acquired during the baccalaureate of arts and sciences curriculum. Postgraduate training varies in depth and quality, and may not be equivalent to similar programs in the United States. Exchange programs, visiting scholars, and internet information are key to improving medical education in the Baltic States.

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