A View From the Czech Republic

Petr Widimsky, MD, PhD, FESC, heads the Cardiocentre Vinohrady, which he founded in 1996, of the Charles University and University Hospital in Prague, Czech Republic. He recalls with Monika Polak, PhD, how things have changed since the fall of communism.

The collapse of communist regimes across Eastern Europe in 1989 was momentous, says Dr Widimsky. It not only liberated nations from central Soviet control, but also enabled the free flow of information, personnel, and capital from West to East and vice versa. But despite the significant political change and a general economic upturn postcommunism, Dr Widimsky recognises clear differences that remain in medical practice between Eastern and Western Europe.

Dr Widimsky, who was appointed professor of medicine by Czech President Václav Havel, is at the head of the busiest cardiology centre in the Czech Republic in terms of admissions. It receives 6000 to 7000 patients per year and is staffed by 65 physicians, including 18 cardiologists and 4 cardiac surgeons.

The differences that exist between the old Eastern bloc and the West are entirely down to funding, according to Dr Widimsky. He says, “There is a clear East-to-West gradient. But the boundary of what is now ‘East’ is shifting — 15 years ago it was Czechoslovakia, but today the Czech Republic and a few other countries like Slovenia have already reached Western standards in medicine. Thus the underdeveloped East is shrinking.”

In 1989, says Dr Widimsky, the differences in cardiology practices between East and West were “huge.” For example, cheap drugs such as long-acting nitrates were sometimes difficult to come by, and in the late 1980s, streptokinase, a cheap drug manufactured in East Germany, was available for only a few patients with acute myocardial infarction (MI). Only a handful of people (around 25 cases per hospital per year) benefited from procedures such as angioplasty or bypass surgery.

In 1991, Dr Widimsky travelled to The Netherlands to take up a research fellowship in Rotterdam and was depressed by the scale of the difference he found between practice there and in his own country. To put it in perspective, Czechoslovakian cardiologists were performing up to only 5% of the volume of procedures (angioplasty or bypass surgery) routinely undertaken in Holland.

Fortunately for Dr Widimsky, his staff, and his patients, on his return in 1992 he was informed by the director at the University Hospital Vinohrady that he could take any necessary steps to replicate what he had seen in Holland. He remembers it as a “very challenging” period. “When I saw the high-tech and high-volume clinical work and research at the Thoraxcentre in Rotterdam and in Zwolle, I hoped that this would also be available for Czech patients one day.”

Following the separation of Czechoslovakia into the Czech Republic and Slovakia on 1 January 1993 (Figure 1), there was a quick recovery by the Czech Republic economy and remarkable progress in its health service. This meant that the day Dr Widimsky was hoping for came only 7 years later. He attributes this success in catching up with the West to the commitment of both politicians and clinicians.

This was achieved after the government introduced free health care for patients in 1991. Workers paid 13.5% of income into the healthcare budget, and healthcare providers were fully reimbursed for acute, emergency, and outpatient care. “For 6 years the only limit was the physical capacity of doctors,” says Dr Widimsky. His own hospital began doubling the annual number of angioplasty procedures undertaken and rapidly went from performing 100 to 1000 procedures each year (Figure 2).
This scale of progress could not continue on economic grounds, and in 1997 a limit was imposed on healthcare providers. The annual increase now allowed by the budget is 3% to 6%. Nonetheless, the benefits for patients have been clear. Dr Widimsky explains, “The mean life span of the population after communism was prolonged substantially, by as much as 6 to 7 years. In 1989, mortality from MI was about 30% — now it is around 5% to 10%.” Although some of this improvement is due to better standards of living, much is also due to better treatment, he adds.

“These days,” Dr Widimsky says, “the Czech Republic is on a par with Western Europe, and, in some instances, even ahead of it. More than 60% of patients with acute coronary syndromes receive clopidogrel on leaving hospital, and more patients per million of the population undergo interventional cardiological procedures in the Czech Republic than in the United Kingdom.” As an example, he says that at least 90% of patients suitable for reperfusion (those who present with ST elevations on ECG within 12 hours of symptom onset) undergo primary percutaneous coronary intervention in the Czech Republic, compared with less than 10% in the United Kingdom.

However, most other former Eastern Bloc countries, including Bulgaria, Romania, Belarus, Ukraine, and, to some extent, even near-neighbour Slovakia, lag at least 10 to 15 years behind the Czech Republic in terms of practice and treatment availability. It is interesting that changes in Poland were not as fast as in the Czech Republic, despite it being the first to topple communism through elections in the summer of 1989. Dr Widimsky puts this down to Poland’s worse economic state at the beginning of its new era compared with that of the Czech Republic. Nevertheless, he is sure the trend towards improvement is the same.

He reiterates that almost all of the differences between East and West are due to a low level of reimbursement. “Many Eastern European countries not only give small amounts of money in absolute terms to health care, but also the relative budget for health [as a percentage of gross domestic product (GDP)] is suboptimal when compared with Western Europe.” He adds, “Where funds are available, as in the Czech Republic in the past 10 years or so, the differences have almost disappeared.” According to World Health Organisation estimates, the United Kingdom’s total health expenditure was 8.1% of GDP in 2004, compared with 10.9% in Germany, 10% in France, and 9.8% in the Netherlands. In comparison, the Czech Republic spent 7.2% of GDP on health that year, while Slovakia, Poland, and Romania spent 5.8%, 6.4%, and 5.7%, respectively. The Russian Federation was among the lowest spenders in Eastern Europe, allocating only 5.3% of GDP to health.

Overall, however, Dr Widimsky remains optimistic, because doctors in all countries know what is best for their patients, and the rapid spread of information achievable through publication and international congresses these days is harmonising practice across Eastern and Western Europe.

“In this respect,” he says, “the European Society of Cardiology is doing a great job in providing funding to enable young cardiologists from less-developed countries to train in the best cardiology centres in Western Europe.” Almost €400 000 has been invested into this important activity this year alone.

It is not just young doctors who are on the move, Dr Widimsky says. “Many Slovakian doctors are coming to work in the Czech Republic due to better pay, and there is generally a move of doctors from East to West.” He adds, “Several hundred doctors have left for Western Europe due to better salaries.”

This flux, he concludes, may cause problems in Eastern countries in the next 5 to 10 years. The challenge to politicians is therefore to create conditions that will persuade highly trained and skilled cardiologists to stay and help improve their countries’ health systems and overall health in the postcommunist era.

Monika Polak is a freelance medical journalist.

Reference

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Spotlight: Alberto Zanchetti, MD, FESC

Dr Alberto Zanchetti, emeritus professor at the University of Milan and scientific director of Istituto Auxologico Italiano, Milan, Italy, is a leading figure in the world of hypertension. He spoke to Jennifer Taylor, BSc.

As a founding member of both the International Society of Hypertension and the European Society of Hypertension, Dr Alberto Zanchetti has a wealth of experience and knowledge in the area of hypertension. He studied at the University of Parma, his home city, and graduated in medicine in 1950. From there he went to the University of Pisa, where he trained in neurophysiology under the world-renowned professor of physiology, Giuseppe Moruzzi, MD.

Dr Zanchetti spent a year, from 1953 to 1954, at the University of Oregon, United States, again looking at neurophysiology and the neural control of circulation. During this time he was a fellow of the Rockefeller Foundation.

This foundation, along with other US institutions and the University of Siena, Tuscany, Italy, funded Dr Zanchetti; this allowed him to set up his own laboratory in Siena. He worked there as associate professor of internal medicine and became involved in the neuropathophysiology and treatment of hypertension. He studied the neural sympathetic control of the circulation in animal models and human subjects, with particular attention to reflex control and behavioural factors, such as sleep and emotions.

During this time, Dr Zanchetti was inspired by Cesare Bartorelli, MD, professor of internal medicine at the University of Siena. Dr Zanchetti says, “These were very exciting years, the first years when hypertension became a treatable disease, so it was an interesting time for the study of hypertension.” The development of drugs to treat hypertension started in the 1950s and continued at a rapid pace.

In 1967, he moved to the University of Milan. As a larger university, it offered more opportunities for his career and for a hospital position. “A bigger university was gratifying,” he says. For many years he was chief of a clinical unit of internal medicine at a University of Milan-affiliated hospital, the Ospedale Maggiore Policlinico.

He was director of the Centre for Clinical Physiology and Hypertension at this institution and was involved in a great deal of clinical work. An outpatient clinic for hypertension was held regularly, and there was a ward for inpatients with cardiovascular disease.

In 1965, Dr Zanchetti was a founding member of the International Society of Hypertension (ISH). The society started with a small nucleus of just 50 people. He was the president of the society from 1978 to 1980.

Because work in hypertension was developing so quickly, and much of the work was being carried out by Europeans, he and his colleagues decided to found a society based in Europe. In 1983, they began European meetings in Milan which initially occurred every 2 years, focussing on clinical hypertension research. The European Society of Hypertension (ESH) was formally set up in 1989, and Dr Zanchetti was president from 1993 to 1995.

“I felt it as a privilege that an important scientific society developed from the meetings I had started in Milan. The importance of scientific societies is to keep people in a given discipline together, and to emphasise relationships,” he says. Those relationships might be within countries, between countries, or worldwide. “Diverse professions, including cardiologists, nephrologists, endocrinologists, and pharmacologists, are all united by an interest in hypertension,” he explains.

Initially, the ESH met every 2 years, but with increasing numbers of attendees and abstract submissions, the meetings were held annually from 2000 onwards. The location of the meetings alternates between Milan, where it all started, and another European city. The 17th European Meeting on Hypertension will be held at the Fiera Milano Congressi Centre in Milan from June 15 to 19, 2007. The ESH currently includes 1155 members.

Another important development that Dr Zanchetti is involved in is the Journal of Hypertension, which began in 1983 as the official journal of the ISH, and is now also endorsed by the ESH. Dr Zanchetti has been editor-in-chief of the journal for the past 12 years. “This is a very important means for communication and providing information and discussion,” he says.

More recently, the activities of the ESH have extended beyond arranging scientific meetings. For example, the annual European Summer School of Hypertension invites young investigators from various European countries for a week of intensive training in the science of hypertension. The society has 2 awards for scientists in hypertension, including the Alberto Zanchetti Award, which is dedicated to excellence in clinical research.

Dr Zanchetti has not only been involved in setting the scene for work in hypertension. He continues to work at the cutting edge of new research and
Researchers are now investigating the relationship between hypertension and metabolic diseases, including diabetes and obesity, which he refers to as “the plague of the modern society.”

The genetic background of hypertension is also receiving much attention. “There is no doubt hypertension has a genetic component,” says Dr Zanchetti. He adds that it is not caused by just a single gene, but is a very complex polygenetic condition, where many genes interact with environmental factors. “This makes the study difficult and is another problem to tackle,” he says.

However, the challenge is already being faced. A large European programme is set to begin studying the genetics of hypertension in a few months, with a grant from the European Commission. Dr Zanchetti is chairing the programme, called “InGenious HyperCare,” which will involve 32 centres in Europe.

Jennifer Taylor is a freelance medical writer.
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