

# A hospital pharmacy in Lithuania

By PAMELA MASON, PHD, MRPHARMS

Pharmacist Pamela Mason recently visited Lithuania and gained an insight into hospital pharmacy within the country

**L**ithuania is the largest and southernmost of the three Baltic countries, with Latvia and Estonia to the north. Twelve years after shedding its Soviet heritage, this country of 3.7 million people has its sights set firmly on Europe.

The pharmacy profession, which has a long history dating back to the 16th century when the first pharmacy was established in the capital city of Vilnius, is playing an important part in the country's effort to join the European Union.

The transition from a centralised to a free market economy continues to be difficult, and pharmacists struggle to find a balance between the growing pressures of business and their desire to be health care providers.

## THE HOSPITAL PHARMACY

**M**y host during my visit was Professor Eduardas Tarasevicius, president of the Lithuanian Pharmaceutical Association, and it was with him that I visited the largest hospital pharmacy, not only in Lithuania, but also in all the Baltic states. Having a floor area of 1,260m<sup>2</sup>, the pharmacy is situated in Kaunas, Lithuania's second largest city. The hospital itself (Kaunas City Hospital) was built in the 1950s and was futuristic for its time, with its light, airy, entrance hall. The hospital has remained relatively unchanged since its construction.

Two flights of stairs lead up to the pharmacy department and to the chief pharmacist, Birute Varanaviciene. Her experience to date has been wide and, following her pharmacy education at Kaunas University, Ms Varanaviciene worked in a community pharmacy in Vilnius, then in the Medical Academy before returning to the university. In 1995, she accepted the post of assistant pharmacist at the hospital and was promoted to chief pharmacist in 1999.

The hospital has 1,995 beds and 47 departments, excluding the polyclinics,



*Birute Varanaviciene, chief pharmacist at Kaunas City Hospital, Lithuania*

which provide primary rather than secondary care. In 2001, 68,546 patients were treated and 36,952 operations, including transplantations, were performed. Two weeks before my visit, the third ever heart transplant had been successfully completed. Bone transplants are currently not performed anywhere in Lithuania, and patients are sent to Estonia, Germany, the United States and other countries. However, this is expected to change in the near future, with hospitals in Vilnius and Klaipeda leading the way.

According to Ms Varanaviciene, the planning and structure of Kaunas City Hospital benefited greatly from a former hospital chief, who was both a doctor and an architect. The wards, which have two to four beds, are of a similar size to those in the United Kingdom, and there are only six

wards remaining which contain 10 beds.

The former hospital chief was sympathetic to the needs of pharmacy and designed the department in such a way that it was not tucked away in the basement. I have been informed that the basement is the usual place for a hospital pharmacy in Lithuania, as indeed it is in many other countries.

By the 1990s, the pharmacy at Kaunas City Hospital was in need of refurbishment, and this was achieved during 1994–95 using a company from Sweden at a cost of \$1m.

## PRODUCTION DEPARTMENT

**T**he pharmacy's production department is now considered to be the best in Lithuania and new equipment donated by Sweden stands alongside the older Russian equipment

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which, although robust and serviceable, is not quite as neat and takes up more space. The department has a large grade B clean room.

Hospital pharmacy in Lithuania operates along traditional lines, with a heavy emphasis on production. Standards throughout the country are not quite up to good manufacturing practice (GMP), but are improving.

Production is divided into three categories and these are industrial, products for use by nurses and in-house production. In-house production includes the traditional range of items, such as creams, liniments and ointments, eye drops, oral liquids and intravenous solutions. Between 60 and 70 per cent of these products are prepared in the department. The pharmacy does not currently prepare cytotoxics or total parenteral nutrition solutions, and radiopharmaceuticals are constituted in the hospital departments that need them.

If a hospital pharmacy does not have such good production facilities, community pharmacies may be commissioned to make various preparations for a hospital. Although this happens less frequently today than in previous years, some community pharmacies still make eye drops, as well as creams and ointments, for local hospital departments.

The pharmacy is open between 7am and 4pm, with an on-call rota, but this is rarely needed. Ms Varanaviciene has a staff of 15 pharmacists and 18 pharmacy technicians.

Technicians receive three years of training after high school, while the pharmacy degree course runs over five years. Ms Varanaviciene also has two engineers (to manage the pharmacy equipment), two technicians to help the engineers, several cleaners, an economist and an accountant.

#### — BUYING MEDICINES

**D**uring Soviet times, hospital pharmacies did not have to manage a budget, and a single state wholesaler provided the pharmacy's requirements. Today, it is a different story and the buying of medicines is a significant part of the pharmacy's work.

In Kaunas, there are various additional members of staff employed for this role alone. One of these is a pharmacist, two are technicians and there is one economist and several bookkeepers. The process is put out to tender and bids assessed from five companies for a total of 4,000 items. These include medicines, laboratory reagents and syringes — but not diagnostic equipment.

When a patient is in hospital, the state sick fund pays only for medicines dispensed by the hospital. This means that patients do not bring their own medicines into hospital. There is also no unit dose system and no immediate plans to introduce one.

Doctors and pharmacists in both the hospital and the community call on Ms Varanaviciene for information on medicines. She has a small library within the pharmacy for this purpose.

There is a great need for more modern pharmacy and drug information texts in Lithuania. For 50 years, almost all the books were published in Russian, and there is still a dearth of Lithuanian reference works. Lithuania is, therefore, grateful to receive pharmacy books written in English.

#### — CURRENT PRACTICE

**H**ospital pharmacy in Lithuania has a great deal of catching up to do, but in Kaunas, the working environment is quite pleasant and much of the equipment fairly new. Pharmacists do not visit the wards and so they do not see patients' drug charts. They have no role in advising patients on how to use their medicines. Practice is, therefore, at a similar stage to hospital pharmacy in the UK in the 1960s.

A great deal of effort is being put into buying medicines. This is no easy task with a tight budget and the dual problems of cost in relation to items imported from abroad and ensuring quality in relation to medicines produced in Lithuania. Ms Varanaviciene is clearly dedicated to her job at the hospital and has a great enthusiasm to succeed.