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# Ovaskainen, Harri

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# MEDICINES IN HEALTH CARE IN FINLAND

#### ➤ Harri Ovaskainen

Director for Pharmaceutical Affairs, M.Sc. (Pharm.) Finnish Pharmacists' Association Iso Roobertinkatu 7 00120 Helsinki e-mail: harri.ovaskainen@farmasialiitto.fi

## ➤ Marja Airaksinen

Professor, Ph.D. (Pharm.) Faculty of Pharmacy University of Helsinki e-mail: marja.airaksinen@helsinki.fi

### ➤ Ulla Närhi

Senior Pharmaceutical Officer, Ph.D. (Pharm.) National Agency for Medicines e-mail: ulla.narhi@nam.fi

### SUMMARY

This article provides an overview of the role of medicines in Finnish health care, and the structure of pharmaceutical services. The major public health concerns will be briefly presented to give a framework for understanding national drug consumption patterns. In this connection, the main principles of the public social insurance system covering the whole population and most of the prescription medications for chronic diseases will be discussed. The different actors in the drug distribution chain are also introduced, including community pharmacies. At the end of the article, there will be a short overview on the Finnish pharmaceutical education system that is based on two academic degrees: Bachelor and Master of Science in Pharmacy, both of which have their own professional roles in health care. At the end, a short review presents the goals of drug policy by 2010, set by the Ministry of Social Affairs and Health in September 2003.

#### INTRODUCTION

Finland is a sparsely populated country in the Northern Europe with a population of 5.2 million. Since 1995, Finland has been a member of the European Union (EU), and on January 1st 2002, the euro banknotes and coins were successfully introduced in Finland among the 12 countries of the euro area. Traditionally, paper products and pulp have been the most important products exported, due to the large forests as a resource for raw material. However, during the last decade, engineering and high technology industries, mobile phones including and telecommunication equipment, have become leading branches of manufacturing. The outstanding growth of electronic industry has been mostly based on Nokia.

## **Health status of Finns**

Finland has one of the lowest infant mortality rates in the world (WHO 2003). In 2002, the life expectancy at birth for both sexes was 78.2 years. However, males have a lower life expectancy compared to females (74.8 years vs. 81.5 years, respectively) as is the case also in many other countries (WHO 2003). The most important causes of mortality among Finnish population in 2002 were cardiovascular diseases (42.7 %), cancers (21.3 %), accidents, suicides and violence (8.3 %), dementia, Alzheimer's disease (8.3 %) and respiratory diseases (7.8 %) (Statistics Finland 2003). Although cardiovascular diseases (CVD) are still the leading causes of deaths, the risk factors of CVDs have been decreasing drastically in Finland since 1970's, when an extensive North Karelia Project was launched. The success of the project has been based on combining several different types of intervention strategies, e.g., by using population strategies and strategies for high risk subgroups.

## **Health services in Finland**

Finland has a public health care system that covers equally the whole population. In addition to public health services, there are private sector service providers. The country is divided into

about 450 municipalities that have the main responsibility to deliver public health services. The primary health care is provided by the local health centres and hospitals, whereas the specialized medical care is provided by five University Hospitals, including altogether 20 central hospital districts.

The total health care costs were 7% of the gross domestic product in 2001 (WHO 2003). The costs are mainly funded by taxation. In 2001, the ratio between governmental and private expenditure on health was 75.6 % vs. 24.4 % (WHO 2003). The private healthcare acts as a complement to the public healthcare system. It offers mainly medical and dental services, and occupational health care services.

One of the biggest challenges in the forthcoming years will be the widening gap between demand and provision of health services, which is a multifaceted problem. Firstly, in the forthcoming years, we have to take care of the growing number of aging population. Secondly, there are some public health risk factors like obesity that will threat health care budgets. Thirdly, there is an internal movement wave going on in Finland, people moving from rural areas to towns and to the Helsinki metropolitan area. Also the health care technology continues to develop with new and innovative, but often more expensive ways of diagnosing and healing diseases.

# Future challenges in health service provision

To be prepared for these and many other challenges in the provision of health services, the Council of State launched a project called "National Project to Secure the Future of Health Care" in 2002 (Ministry of Social Affairs and Health 2002). This project has helped decision makers at various levels to focus on crucial issues to assure the quality of care. For example, the public health care employers are required to secure that the health care professionals receive annually 3–10 days of continuing education relevant to their work. According to the project, the public health services should provide access to care in

health centres for non-emergency patients within three days. If they need specialised hospital care, they need a covering note from their health centre physician. They should be examined at a specialised hospital polyclinic in less than three weeks after the referral. Specialised hospital care should be made available within three months. In order to develop seamless care and service protocols, further research is needed.

In Finland, the density of physicians is comparable to other European countries. There is a doctor for every 312 people of working age (**Table 1**). About 47% of Finnish doctors work in hospitals and 22% in health centres.

Dental care services for adults are mainly delivered by private dentists. About half of the dentists work as private practitioners. Health centres provide free dental care for the patients less than 19 years of age. Health centres also provide some dental care for a charge for persons aged 19 years or older, but access to care varies considerably between municipalities.

Table 1. Health care personnel in Finland in 2004 (Sources: The National Authority for Medicolegal Affairs, The Association of Finnish Pharmacies, and The Finnish Veterinary Association).

Personnel Group	Total Number of Working Age Health Professionals	
Physicians	17,600	
Dentists	5,000	
Veterinarians	1,500	
Nurses	61,000	
Pharmacists (M.Sc.)*	2,000	
Pharmacists (B.Sc.)	5,900	

<sup>\*</sup> Including about 580 pharmacy owners

# PUBLIC HEALTH CONCERNS AND DRUG CONSUMPTION

According to the health interview survey (Helakorpi et al. 1995) on the Finnish population, about one fourth of the people have been diagnosed a chronic illness or have been treated by a physician during the preceding year. The three most common chronic diseases are hypertension, asthma (or chronic obstructive pulmonary disease) and coronary heart disease (Finnish Statistics on Medicines). In 2003, over 490,000 patients received special reimbursement from the Social Insurance Institution (SII) for the treatment of chronic hypertension, and over 207,000 patients for chronic asthma or chronic obstructive pulmonary diseases. The increase of diabetes (especially type 2) is currently the most troubling health problem. In 2003, its prevalence increased by 4.7% (Klaukka and Paldán 2004). Over 150,000 diabetic patients received special reimbursement for their drug costs.

The changes in the prevalence of common chronic diseases are reflected in the drug consumption statistics. The statistics are available in the Internet http://www.nam.fi/english/information/consumption/index.html.

During the 1990s, the most sold medicines in Finland were those of ATC group C, i.e., cardiovascular drugs (Finnish Statistics on Medicines). In 2003, this therapeutic group was in the second place, while medicines for nervous system, ATC group N, were the most sold ones. The difference was small and it was partly caused by the increase in the use of new and expensive antipsychotics.

In Finland, monetary increase in the sales of medicines has been annually about 10%. The trend is similar in other Nordic countries. In 2003, the increase was 6.7% and the total market of medicines was approximately EUR 2.16 billion (at pharmacy prices with VAT). Generic substitution, which was introduced in April 2003, has obviously succeeded to diminish the costs. In financial terms, cholesterol-controlling medicines have been the fastest growing group, atorvastatin and simvastatin being the most sold drugs in 2003.

When calculated in DDD/1,000 inhabitants/ day, the most used drugs were the ones belonging to the cardiovascular group (ATC group C). Drugs affecting the alimentary canal (ATC group A) were the second, and drugs for nervous system the third biggest groups. In 2003, the most used drug in DDD terms was acetylsalicylic acid used for the prevention of arterial stenosis.

Of the total sales of medicines, about 70% consists of prescription-only medicines in outpatient care, about 15% of medicines used for inpatient care, and about 15% of non-prescription medicines.

In 2002, the retail sales (inclusive of VAT) of OTC drugs for self-medication were approximately EUR 272 million, an increase of 4 % from the previous year. Finnish people purchase large quantities of painkillers for self-medication. Ibuprofen was the most used over-the-counter (OTC) painkiller, accounting for 53% of the sales of the OTC painkillers in 2003. However, the sales of paracetamol are increasing in self-medication. After painkillers, the second most sold medicinal products for self-medication are vitamins and trace elements. The real value of these products is much higher than is shown in statistics, because the statistics do not include herbal medicines or food supplements.

# PRICING AND REIMBURSEMENT OF PHARMACEUTICALS

The pricing of prescription and non-prescription medicines is regulated by the government in Finland. The retail price is determined on the basis of the wholesale price of the product (**Table 2**). Pharmaceutical industry can more freely set the prices for non-prescription medicines than for prescription medicines that are reimbursed by the public health insurance.

Before a prescription medicine is accepted to the category of reimbursed medicines by the state, it should go through a procedure of applying the reasonable wholesale price from the Pharmaceuticals Pricing Board (PPB), a governmental body operating under the Ministry of Social Affairs and Health. Basically, the retail price of the medicine is the same in all community pharmacies around the country. It is calculated from the wholesale price according to a degressive drug tariff enacted by the Council of State (**Table 2**).

## A special tax for pharmacies

Finnish community pharmacies pay to the state a special tax called pharmacy fee, which is progressively proportioned to the turnover. The idea of the pharmacy fee is to balance financial profitability differences between pharmacies of different sizes. On average, the pharmacy fee is 7%. However, for the biggest pharmacies, the pharmacy fee is over 10%. On the other hand, the smallest ones do not pay it at all. As a scarcely populated country, Finland has used the pharmacy fee system to ensure availability of pharmacy services also in remote areas.

### Public drug reimbursement system

Finnish drug reimbursement system was introduced in 1963. Since then, all the citizens have been insured by the government in Social Insurance Institute (SII). The current reimbursement system is two-phased. Most

Table 2. The structure and degressivity of the drug tariff (excluding the value added tax (VAT) of 8 per cent for medicines).

Wholesale price, € (euro)	Resale price
0 – 9,25	1,5 x wholesale price + 0,50 €
9,26 – 46,25	1,4 x wholesale price + 1,43 €
46,26 – 100,91	1,3 x wholesale price + 6,05 €
100,92 – 420,47	1,2 x wholesale price + 16,15 €
over 420,47	1,125 x wholesale price + 47,68 €

medicines intended for the treatment of acute illnesses are in the basic refund category, in which 50% of any sum exceeding a  $10 \in$  deductible per purchase is reimbursed. In serious chronic illnesses, the society supports the citizen's medical treatment by reimbursing 75% or 100% of any sum exceeding the  $5 \in$  deductible per purchase. The insured citizen has a  $604.72 \in$  annual limit to his medicines purchases (year 2004). If this sum is exceeded by more than  $16.82 \in$ , all the sum is reimbursed.

The basics of the drug reimbursement system have been quite stable since its establishment in 1960's. Only minor changes have been made, mainly because of the high increase in public expenditure on medicines. One way to restrict the increase of pharmaceutical costs has been generic substitution that was introduced in April 2003. At least one year after its implementation, the generic substitution has been quite a powerful tool for this task, although there is no evidence of the cost-effectiveness of the procedure. In the Finnish generic substitution system, the National Agency for Medicines publishes every third month a list that shows which branded, generic and parallel imported products are interchangeable under the system. The Finnish system does not employ reference prices.

The last changes to the reimbursement system were implemented after the judgement of the European Court of Justice in June 2003. In its judgement the court decided that Finland was breaking the transparency rules of governing in decisions on special reimbursements for medicinal products, and did not honour the concerning deadlines pharmaceutical reimbursement issues. After the judgement, Finnish legislation was developed in order to implement the principles of the directive concerning the transparency of measures regulating the pricing and reimbursement of medicinal products.

At the moment, the reasonable wholesale price is applied for each pharmaceutical product, clinical food preparation or basic cream from the Pharmaceuticals Pricing Board (PPB). The PPB must process applications for the reasonable wholesale price within 90 days of their submission. The application concerning special reimbursement for the product can be done after

the reasonable wholesale price has been ratified by the PPB, and two years period has passed from this ratification. In specific cases this decision can be made before the two years have exceeded. The special reimbursement can be applied only for a pharmaceutical product, which is indicated to a severe chronic disease accepted by the Council of State. Also in the case of special reimbursement, the time for handling the applications is 90 days.

When deciding on what constitutes a reasonable wholesale price, the PPB takes into account the costs of the drug therapy, and the benefits to be gained from its use by the patient and by the social and health care services in view of the total expenditure of public funds. The Board will also consider the costs associated with therapeutic alternatives, the prices of essentially similar pharmaceutical products, and the price of the medicine in question in states belonging to the European Economic Area (EEA). Furthermore, the R&D and manufacturing costs are taken into consideration when deciding if they are included in the application. The decisions of the PPB are in force for five years, and for a product containing a new active ingredient for three years.

The Ministry of Social Affairs and Health released its pharmacoeconomic rulings "Guidelines for preparation of an account of health-economic aspects" in 1999. When a reasonable wholesale price is applied for a medicinal product that contains a new active ingredient, and also otherwise if required by the Pharmaceuticals Pricing Board, the application shall be accompanied by an account of health-economic aspects. The purpose of the account of health-economic aspects is to produce a comprehensive assessment of the costs of such medicinal product and other alternative therapies as well as the relating benefits.

# DISTRIBUTION OF PHARMACEUTICALS IN FINLAND

In Finland the drug distribution system fulfils the western quality standards, and it has been organized in concordance with the EU and national legislation. The structure of Finnish drug distribution system and its value of the material flow in percentages are shown in **Figure 1**. In the following chapters the different actors of the drug distribution chain have been discussed more in detail.

## **Community pharmacies**

Finland has a privately owned community pharmacy system with about 800 outlets covering geographically the whole country. In addition to privately owned pharmacies, University of Helsinki and University of Kuopio own a right to run a pharmacy to support teaching and research in the Faculties of Pharmacy. The Helsinki University Pharmacy consists of 17 big outlets in Helsinki and some other urban communities, the annual prescription volume being about 10% of the total annual volume of all pharmacies (www.yliopistonapteekki.fi). Kuopio University Pharmacy that was established in 1999 has one outlet in Kuopio (www.kuopionyliopistonapteekki.fi).

The pharmacy business in Finland is regulated by the government (National Agency for Medicines) that controls location and number of outlets; and ownership. The leading policy has been to ensure easy access to medicines with reasonable prices.

Pharmacies have a monopoly over prescription and non-prescription drug sales, and

they are mandated to focus on dispensing medicines and counselling patients. As a consequence, over 90% of the turnover of the pharmacies consists of the sales of medicines. To support the role of community pharmacies as a part of health care, only pharmacists with a master's degree are allowed to own a pharmacy, and only pharmacists with a bachelor's or master's degree may serve the customers. On an average, there are 1-2 pharmacists with a master's degree and 4-5 with a bachelor's degree working in a typical pharmacy. Since 1983, pharmacies are mandated to counsel patients. Since 1988, they are mandated to provide facilities for patient counselling. Politicians have chosen to continue and reinforce this policy after Finland ioined the EU in 1995.

Finnish community pharmacies have experienced the same revolutionary changes than pharmacies in many other Western countries, as the drug industry took over the manufacturing of medicines. Today, only 1–2% of the medicines are compounded in the pharmacy. Most of the medicines come from manufacturers in ready-to-sell packages, including patient information leaflets (PILs) and bar codes.

All the pharmacies process prescriptions by computers, and since the late 1990's, physicians have been able to use computerized order entries to write prescriptions. E-prescribing procedures

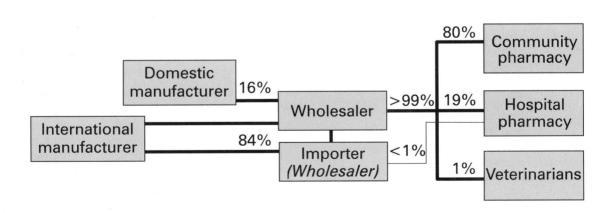


Figure 1. The structure of Finnish drug distribution system

have been under work for several years, and they are approaching a pilot phase this year. Electronic patient records are becoming more and more common in health care, although community pharmacies do not have access to them. Pharmacies have their own electronic customer record systems that are extending towards supporting management of the therapy and assuring therapeutic outcomes. Today, community pharmacists also have a good access to electronic drug information sources through health portals on the Internet. The work of the modern community pharmacist has become a work of a drug expert that needs to communicate expert knowledge with patients and other cooperators (Savela 2003).

Several efforts have been taken to change the professional role orientation of Finnish community pharmacists within the last 15 years. The process has involved research to support national decision-making and to understand the needs of the patients. As a national survey by the National Agency of Medicines in 1988 identified patient counselling and appropriate facilities for it as the main service areas needing improvement, a lot of effort has been put in to improve these services. The first systematic joint project in this respect was the WHO EuroPharm Forum's "Questions about Medicines" (QaM) -campaign in 1993-1996. The programme was run in Finland as a long-lasting public awareness campaign that was evaluated by an observational study (Airaksinen et al. 1998, Vainio et al. 2002).

Experiences with QaM together with other service development programmes (e.g., Närhi 2001) have been necessary steps before applying the philosophy of pharmaceutical care into systematic service models to prevent, identify, and solve drug-related problems. In 1997, the Association of Finnish Pharmacies established a national strategy for professional community pharmacies that has reached a wide consensus among the pharmacy profession and the key stakeholders.

# TIPPA – Customized Drug Information for the Benefit of the Patient from the Pharmacy

To promote implementation of the professional strategy, Finnish community

pharmacies have been exposed to an intensive development process during the four-year period 2000-2003 to take more responsibility of assuring optimum outcomes of drug therapies. This has been operationalised through enhancing evidence-based patient information and adapting a new, patient-oriented approach in communicating about medicines. To achieve these goals, pharmacies have been encouraged to make strategic long-term development plans that are based on evaluation of current practices, including assessment of customer needs, dispensing processes of prescription and nonprescription medicines and competency of the personnel. The process was nationally run by a coalition consisting of the key stakeholders in pharmacy, including Ministry of Social Affairs and Health, SII, National Agency for Medicines, professional associations, universities and continuing education centres.

Although the actual TIPPA Project is over, the process is still going strong in pharmacies. According to evaluations conducted, pharmacies have implemented actions related to TIPPA, e.g., intensified use of drug information sources, assured privacy in customer service areas, and organised training for the personnel. The development process has been reflected to the quality of patient counselling practices as measured by pseudo-customers. For the future coordination of national activities after TIPPA, there will be a permanent coalition, with a shift towards multidisciplinary and more sophisticated service models, e.g., medication review procedures.

## **Hospital pharmacy**

Finland is divided into 20 hospital districts, each providing specialist consultation and care for its population. Each hospital district has a central hospital and in these districts there can be also regional hospitals. Central hospitals have departments for most main specialties. Of the central hospitals, five are University Hospitals that provide specialised levels of treatment. These provide the most advanced medical care, including highly specialized surgery and treatment for rare diseases. In comparison to the situation in other countries, the number of

hospital beds in Finland is fairly high.

Hospitals and other health care institutions may have a hospital pharmacy or a medicine centre, and a permission to set these up is required and obtained from the National Agency for Medicines (NAM). In 2002, there were 24 hospital pharmacies and 224 medicine centres. The manager of a hospital pharmacy is required to have a M. Sc. (Pharm.) degree and the manager of a medicine centre is required to have a M. Sc. or a B. Sc. (Pharm.) degree. The total amount of pharmacists working in the area of hospital pharmacy was 473, including 71 M. Sc. and 402 B. Sc.

The major activities in the hospital pharmacies are drug procurement, drug dispensing and drug compounding as well as providing drug information. Ward pharmacy services have been provided in a growing number of hospitals. Hospital pharmacies are able to dispense drugs to outpatients on certain conditions. The medicines are free of charge for these patients. The pharmacist involved has a duty to see that the patient receives medication advice. There is also a specific article concerning the Finnish hospital pharmacy in this Dosis issue.

## Wholesale

Finnish wholesaling system is based on single channel distribution. This means that each wholesaler is delivering only the products of the pharmaceutical manufacturer with whom they have an agreement. This system has been accepted by the Finnish Competition Authority, which has seen the system as a cost-effective way of wholesaling, although it gives the monopoly of the wholesale scale distribution to a chosen company. In this single channel distribution system, it is the pharmaceutical company instead of pharmacy, who is looking for a competitive and cost efficient partner, while the pharmacies do trade with all the wholesalers. With this system the margins of the wholesaler have been kept on a low level, and the wholesalers are receiving quite a big part of their turnover by selling different added value services to their customers.

At the moment there are two wholesalers in Finland, and they serve the whole country. The

companies are Oriola, which is owned by the Finnish healthcare sector company the Orion Group, and Tamro, which is owned by the German wholesale company Phoenix. Both companies have invested heavily into the state-of-the art technology and, for example, automated product picking systems are used in everyday practice in order to increase productivity.

# Research and manufacturing of medicinal products in Finland

According to the Pharma Industry Finland (www.pif.fi), the Finnish pharmaceutical industry annually invests about 17% of its turnover into research and development. The quantity of research is reflected by the number of clinical drug trials, studies on humans to establish the effects of drugs at different stages in the body. Before the start of any clinical trial, notification must be made to the National Agency for Medicines (NAM). The number of trials since 1995 has been quite stable. In 2003, the NAM received notifications of 30 human pharmacology (Phase I) studies with the primary focus on the safety of drugs, carried out on healthy volunteers or very small patient groups. Seventy-two therapeutic exploratory (Phase II) notifications were received on preliminary therapeutic studies on relatively small patient groups, and 113 notifications on therapeutic confirmatory (Phase III) trials (pivotal clinical studies on large patient groups). There were 58 notifications on post-marketing therapeutic use trials (Phase IV).

In recent years, Finland has invested heavily in biomedical research. A great proportion of funding of research and development comes from the Finnish State. TEKES, the National Technology Agency of Finland, is the main financing organisation for applied and industrial research and development in Finland. Currently, a total of about 50 extensive national technology programmes are under way (www.tekes.fi). Two manufactures, Leiras and Orion Pharma, have succeeded in developing internationally marketed chemical entities and innovative formulations.

In manufacturing, the trade balance between pharmaceutical export and import has been negative. In 2001, the cost of the pharmaceutical

exports was EUR million 330 and imports EUR million 849 (www.efpia.org). In February 2004, 22 companies were manufacturing medicines in Finland. Most of them were small, and manufactured specialised items such as radiopharmaceuticals.

# FINNISH EDUCATIONAL SYSTEM FOR PHARMACISTS

In Finland, there are two Faculties of Pharmacy, located in the University of Helsinki (www.helsinki.fi/farmasia) and in the University of Kuopio (www.uku.fi/farmasia). These Faculties have the main responsibility of training qualified personnel for the needs of different pharmaceutical sectors. In addition, Åbo Academi is training a small number of Swedish speaking bachelor degree pharmacists.

There are two qualifications in pharmacy in Finland: bachelor's and master's degree. The Ph.D. (Pharm.) is the main postgraduate degree, although it is also possible to have a Licentiate in Pharmacy degree that is positioned between the master's degree and the Ph.D. degree. The Faculties also provide specialization studies in hospital (Kuopio), industrial (Helsinki) and community pharmacy (Kuopio and Helsinki) for the bachelors and masters.

The bachelor's and master's degree studies are integrated so that each student will first achieve the bachelor's level in three years. The bachelor's level is designed to foster professional competency needed especially in community pharmacies. The curriculum is designed to integrate theoretical studies and practical periods in community pharmacies (obligatory, minimum three months) and hospital pharmacies (voluntary, maximum three months). The twoyear master's program is targeted to develop scientific skills. It includes methodological and subject-related studies, followed by a master's thesis project that corresponds to 6 months of work on a given research topic related to the main subject (pharmaceutical technology and biopharmacy; pharmaceutical chemistry; pharmacology and toxicology; pharmacognosy; and social pharmacy).

The current basic curriculum in pharmacy is

based on biomedical and social sciences in addition to the traditional chemistry and pharmacognosy. The faculties of pharmacy have tried to find a balance between natural-bioscience orientation and health services orientation. Social pharmacy and pharmacy practice research are playing a more important role in fostering the competency of pharmacists than before. It provides tools for understanding and evaluating the role of medicines in health care, as well as the role of the pharmacy profession and pharmaceutical services in this context.

As a part of the Bologna declaration (The European Higher Education Area 1999), the basic pharmacy curriculum will be re-evaluated in all the three training units (Helsinki, Kuopio and Turku) during this year. The reform will be based on assessment of core competencies needed in the work of the pharmacist. The competencies will be classified to three categories: what pharmacists must know, what they should know and what would be nice for them to know in their work. The assessment of competencies will be a two-way discourse between universities, practitioners, authorities and professional organisations. As a part of this process, the faculties will also re-evaluate the role of specialization education.

The Faculties of Pharmacy are following the current academic trend of combining research and teaching, and involving students in research projects. The faculties have invested in developing pedagogic skills of their teachers and scientists. The tendency is to develop integrated, experimental courses that are based on constructive learning to build up reflective skills of the students to assure continuous development of their professional competency. Increasingly, the learning processes are supported by web-based learning environments. In addition to teaching the basic facts, more emphasis is put on teaching the principles of evidence-based practices, the use of therapeutic guidelines and balanced drug information sources, as well as applying information technology in professional environments. One important aspect is also acquiring the skills needed in working in multiprofessional health care teams as experts on medicines.

## Continuing education in pharmacy

Finland has developed a well-organized pharmaceutical continuing education system since 1980's (Savela 2003). It consists of long-term professional development training, other long-term training modules and short ad hoc courses of 1–2 days.

Finnish pharmacists have well adapted the principle of lifelong learning. E.g., most of the community pharmacists actively update their professional skills (Savela 2003). This is regarded as a norm, even though in Finland the attendance to continuing education is not controlled by counting credits, although keeping the professional knowledge updated is required by law. It has been considered as a shared responsibility of the employer and the individual professional. According to a recent study, access to continuing education is still a problem for about 20% of community pharmacists (Savela 2003). New approaches and training methods are needed to reach these pharmacists. There is also a need to develop more effective learning processes that will influence working patterns and, thus, imply to service provision. In that

sense, the most effective method seems to be to involve the whole working society to a long-term development process (Kansanaho et. al. 2003). In the future, multiprofessional training will be needed both locally and nationally to develop new multidisciplinary service models in order to improve therapeutic outcomes and to support guided self-care of long-term therapies.

# FUTURE TRENDS: NATIONAL PHARMACEUTICAL POLICY 2010

Finland as an EU-member has quite many parts of its pharmaceutical policy common with the other EU-states. Directive 2001/83/EC of the European Parliament and of the Council rules many processes and practices, in which medicinal products for human use are tested before the marketing authorisation, and how they are manufactured, labelled, wholesaled and marketed/advertised. Also the monitoring of the safety of medicinal products is carried out by an integrated European system of pharmacovigilance.

However, there is also space for national

Table 3 Key	anals of the	Finnish	Pharmaceutical	Policy 2010
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- 1. The safety of medicines is maintained at the high level
- 2. Prescribing is rational
- 3. A good access to medicines throughout the country is secured
- 4. The use of medicines is appropriate
- 5. Medicine costs are reasonable for both patients and society
- 6. Administration system is transparent
- 7. The demands of veterinary therapy have been taken into account in pharmaceutical service
- 8. Finland is an active actor in the European co-operation of monitoring the safety of medicinal products
- 9. Pharmaceutical research is supported

pharmaceutical policy, because many functions like the drug distribution systems and reimbursement systems are decided at the national level. What will then the Finnish Pharmaceutical Policy be like in the future? That question was given quite a detailed answer by the Ministry of Social Affairs and Health in a document Pharmaceutical Policy 2010. The policy paper defines the most important objectives for national pharmaceutical policy for the present decade.

The starting point is securing a good access to medicines throughout the country and maintaining the safety of medicines. A comprehensive access to medicines in all regions will be safeguarded through the present type of pharmacy system. The sale of medicines, also of OTC medicines, will take place at pharmacies in the future. The subject that has raised the most discussion concerns the proposed gradual elimination of the progressive pharmacy fee, which would enable a reduction in the retail prices of medicines by about 7 percent. The Ministry of Social Affairs and Health has requested The National Agency for Medicines in Finland to define the matter by 30.11.2004 (Wahlroos 2004). The elimination of the pharmacy fee, even if implemented gradually, is quite controversial, because without any supportive acts it may cause a financial threat for the 20-60 smallest pharmacies.

The development of new medicinal products and pharmacotherapies is promoted by

supporting pharmaceutical research in various ways, e.g. by funding research and securing education and training, and with operational prerequisites for pharmaceutical industry.

According to the Pharmaceutical Policy, the rational prescribing and the rational use of medicines will be promoted. In order to ensure rational pharmacotherapy, the different competent authorities should promote a good prescription practice. In 2003, the Pharmacotherapy Development Centre (Lääkehoidon kehittämiskeskus ROHTO) as a new special health authority started working in order to collect and deliver information that will promote rational pharmacotherapy and to implement information in everyday practice, especially in physicians prescribing patterns.

In addition, efforts are made to ensure that the increase in medicine costs will not weaken the possibilities of the society and the citizens to use the best pharmacotherapies available. The drug reimbursement system under health insurance will be revised with a view on clarification and simplification. An additional aim is a household-specific annual ceiling that could, as necessary, be lowered on the basis of low incomes.

The role of the hospital pharmacies was not handled in the Pharmaceutical Policy 2010 and, therefore, hospital pharmacists have been arguing that their role in health care should be regarded as a special work group.

## TIIVISTEI MÄ

Artikkeli kuvaa lääkkeitä ja lääkehuoltoa osana suomalaista terveydenhuoltoa. Lääkkeiden kulutusta tarkastellaan sairastavuuden ja erityisesti keskeisten kansansairauksien näkökulmasta. Artikkelissa kerrotaan myös lääkkeiden hinnan muodostumisesta ja lääkekorvausjärjestelmän roolista lääkekustannusten kattamisessa. Lääkehuollon eri toimijat – apteekit, sairaala-apteekit, lääketukkukaupat ja lääketeollisuus – on kuvattu ja esimerkiksi ammattiapteekin palveluiden kehittämisestä mukaan lukien TIPPA-projekti on kerrottu. Lisäksi suomalainen farmaseuttinen koulutusjärjestelmä kaksiportaisine yliopistokoulutusjärjestelmineen on esitelty ja farmaseutin ja proviisorin rooleja työelämässä on käsitelty lyhyesti. Lopuksi artikkelissa tarkastellaan lähitulevaisuuden suomalaista lääkepolitiikkaa erityisesti sosiaali- ja terveysministeriön syksyllä 2003 hyväksymän Lääkepolitiikka 2010 -asiakirjan pohjalta.

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