Critical Pathways: The Role of Pharmacies in Estonia Today and Tomorrow

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A good pharmacy network
Women prefer the pharmacist profession

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PGEU database 2012-2013
Inhabitants per pharmacy

PGEU database 2012-2013
1.5 years has been like a roller coaster for pharmacies

- Dec 2013: The State Court repealed the pharmacies’ establishment criteria
- June 2014: Temporary restrictions
  \textbf{Pharmacists became health care professionals}
- Dec 2014: No restrictions
- March 2015: Ownership restrictions

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Today, the use of resources is not optimal

The limited resource base is small – low profits and lack of work force

A solution would be to decrease costs or the controlled regulation of the number of pharmacies

Today, in Estonia there are 178 pharmacies too many. Reasonable would be 4,400 people per pharmacy ("Apteekide ressursikasutuse analüüs" Olavi Grünvald Sept 2014).
Most important changes in the law

• The pharmacist as a health care professional
• More than 50% of pharmacy shares have to belong to a pharmacist by 01.04.2020
Cities with more than 4,000 inhabitants have to restructure all the branch pharmacies into general pharmacies.

After April 2020, vertical integration in the pharmacy sector is not allowed – wholesalers cannot own pharmacies.

Duty for big pharmacy companies to provide pharmacy services in rural areas upon a municipality’s request.
A new way to make the pharmacy services more accessible
• A one-off allowance paid to a pharmacist or assistant pharmacist who starts work
  • general pharmacy or branch pharmacy or located in another settlement at least 10 kilometres from a city or a rural town and at least five kilometres from an existing general pharmacy or branch pharmacy;
  • works or operates with a workload of at least 30 hours a week;
  • the amount of the beginner’s allowance is 15,000 euros;
  • obligation to work for 5 years.
Compulsory continuing professional development (CPD)

- 40 academic hours in two years
- Pharmacy owner’s obligation to pay
- Trainings are organised by a professional association or a higher education institution that teaches the pharmacist or assistant pharmacist curriculum
Estonian Pharmacies Association’s Learning centre

- Started in 2011
- e-learning sessions, classroom trainings
- In 2014, 479 pharmacists got a diploma
  - The total of training sessions was 1,286 times, the average was three training sessions per one person
- From April 2015, possible to take e-learning sessions in Russian
- 20 hours of new trainings per year
Problems we have to face

• Lack of workforce
  – Study in 2012, 79.9% pharmacies participated
    • 684 pharmacist (82% of 836) and 584 pharmacist assistants (94% of 618)
    • 6% workers are older than 65 years
    • Conclusion: on the work market, we are 115 pharmacists and 112 pharmacist assistants short
• How to change the thinking?
• How to engage high school graduates to become pharmacists?
  – Change the pharmacist study
    • The study period from 5 years to 3+2 years
    • Need to unify the study in the first three years at the University of Tartu and Tallinn Health College
    • After three years, graduates from both could apply for the master’s programme at the University of Tartu
    • All the professional organisations support it
Raise people’s awareness about the profession

- “Ask your pharmacist” campaign in 2011
- Allergy campaign – ask your pharmacist or doctor how to treat the allergy

- Co-operation with the Health Insurance Fund and the State Agency of Medicine - generic replacement, patient portal
Allergy campaign flier
Raise the quality of pharmacies

• Good pharmacy practice guidelines 2012
  – 10 different chapters
  – Two voluntary questionnaires
  – In September 2014, 205 pharmacies got a badge and public attention
  – Working group is continuing the work to complement and renew the guidelines
• Demographic challenges
• Rise of chronic diseases and health risk factors
• Little work-force in the health sector
• Economic pressure
• Patient-centred care

Source: EUROPEAN COMMUNITY PHARMACY BLUEPRINT
Additional services in the Estonian pharmacies

- Pharmacies started to provide services to get an advantage on the market ahead other pharmacies
- Good pharmacy practice guidelines (2012) – measuring blood pressure, cholesterol and blood glucose
- Today the services are not regulated by the law
  - Quality of the services may vary among pharmacies
  - Pharmacy sector has a tacit agreement that training is needed to provide all the invasive services
Basic additional services

• Blood pressure measuring
• Blood glucose measuring
• Cholesterol measuring
• Haemoglobin measuring
• Body component measuring
New kinds of services

- Bone mineral density
- Digital foot scan
- Veins diagnostics
- Skin testing
- Measuring body temperature
- Wound care
- Genetic tests – weight management and athletic ability
Needed services

- Medication use review
- Polypharmacy – multiple chronic conditions
  - Unit-dose packaging
  - Chronic condition management
    - Diabetes management
Medication use review

Do you sometimes forget to ask for a prescription?

How do you take your medication?

How do you feel after taking your medication?

Do you sometimes forget to take your medication?

Do you take additional food supplements?

Do you know which medication can be taken together?
Adherence statistics in Estonia

- Estonian statistics (2011)\textsuperscript{1}
  - 80-85% of prescribed medication is actually bought
  - 65% of patients with chronic diseases fill all their prescriptions
- Up to 9% of all emergency room visits are caused by adverse drug events \textsuperscript{1}

\textsuperscript{1) } Riigikontroll (2012). Ravimite hüvitamise korraldus.
International experiences

- 40-60% of patients fail to take their medicine as prescribed\(^1\)
- 20% of elderly patients admit they have discontinued taking one or more prescribed medication\(^2\)
- 50% of elderly patients admit they have altered the dosage of one or more medication\(^2\)
- 20% of elderly have shared their prescription medication with others\(^2\)
- Only 5% of elderly patients with a complex drug regimen achieve a pill count of over 80% with all their medication\(^3\)

Effects of poor adherence

“Drugs don’t work in patients who don’t take them”

Pharmaceutical care concept

- Apotheka pharmaceutical care program is a **patient-centered** service that combines
  - Medication use review
  - Administration aids (unit dose dispensing)
  - Continuous support and counseling by the pharmacist
Unit dose packaging
• Improved treatment results and quality of life
• Reduced risk of ADE’s
• Potential savings due to less waste of medicines
• Improved communication with the pharmacist
• Simple and safe way of managing complex drug regimens

Happy patients
Possibility to offer advice and counseling regarding the whole medication regimen, not a single prescription

Possibility to have a greater positive impact on the treatment outcome

Possibility to influence the role and responsibility of pharmacists in primary care
Outcomes for health care

- Improved treatment outcomes and longer life expectancy
- Reduction of drug related problems
- Significant reduction of total healthcare costs
- Saving the time of doctors, nurses, caregivers ...
- Possible reduction of medication expenses
  - Less waste
  - Rational use of drugs
  - Use of bulk packages
  - Increased generic substitution
Barriers to providing unit dose packaging

- **Regulatory barriers**
  - In cooperation between pharmacies
  - In home delivery

- **Technical barriers**
  - Prescription handling
  - Information availability

- **Social barriers**
  - Pharmacists’ role in primary healthcare
  - Cooperation with doctors, nurses, caregivers
The pharmacy robot

https://www.youtube.com/watch?v=PAoAFZVNSkU
Launched in November 2013
E-prescription has given the possibility to dispense POMs via Internet pharmacy
All logs must be kept
New challenges for pharmacists – counseling without using any body language, emotion
This type of service is comfortable e.g. for people with disabilities, from rural areas etc.
Pharmacists’ changing role

- The most accessible health care professional
- Obtains the role of being the GP’s “goal keeper“
- IT- solutions and new technology ensure a more patient centred practice model
- New challenges in providing additional services
The oldest European pharmacy that has continuously been operating in the same building

- Opened by Johan Molner, a German doctor in 1422
- Since the middle ages a special marzipan prescription has been prepared and sold there to relieve heart-ache
Thank you!

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