Kidney health developments and problems in Estonia

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Outline

- Introduction
- Kidney health developments in Estonia
- Kidney health problems/inequalities
- Future trends and expectations
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Introduction

- Estonian Society of Nephrology (est. 1994)
  - http://nefro.ee/eng/

- The University of Tartu (est. 1632) is the only university from the Baltic States, which is among 3% of the best universities in the world
  - Magazine Times Higher Education (THE):

- The Faculty of Medicine
  - 99% of medical doctors, dentists and pharmacists in Estonia have a degree from the University of Tartu.
  - the Faculty of Medicine attract international students
Introduction

- Chronological facts of renal replacement therapy in Estonia:
  - 1966 - hemodialysis – at Tartu University Hospital (TUH)
  - 1968 – kidney transplantation
  - 1978 – hemodialysis in Tallinn
  - 1994 – peritoneal dialysis
  - 1994 – establishment of Estonian Society of Nephrology
  - 1997 – first private HD unit in Pärnu
  - 2000 – reorganization of HD service at Tartu Univ. Hospital
  - 2001 - 2008 – sharp increase of RRT patients
  - 2013 – celebration of 1000. kidney transplantation at Tartu University Hospital
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Kidney health developments

Epidemiological Data of Kidney Diseases in Estonia Annual Report 2012
www.nefro.ee/eng/
Kidney health developments

- Although dialysis and kidney transplantation was available in Estonia already in late 60s:
  - the development of nephrology as a speciality (nephrology acceptance in nomenclature, 1994),
  - broadening of the availability of dialysis
  - start of scientific projects in nephrology
  - other activities

.... started after the Estonian Society of Nephrology constitution in 1994
Kidney health developments

- **Estonian Society of Nephrology:**
  - Members – 27: nephrologists - 16 (12 pmp)
  - Residency in nephrology started in 1995 at Tartu University
  - Residency duration currently - 4 years, from 2014 – 5 years
  - Chronic kidney disease (CKD) – an important public health issue. Nephrologists focus today their efforts on preventing and delaying the progression of CKD
  - Annual World Kidney Day celebrations

- [www.nefro.ee/eng/](http://www.nefro.ee/eng/)
Kidney health developments

Estonian Society of Nephrology:

- Baltic collaboration since Riga and Tartu conferences in 1992 and 1995 supported by ISN and ERA-EDTA.
- Regular biannual Baltic nephrology conferences continue: 2014 – Lithuania, Dubinginai
- ESN is EKHA member 2014
- RRT epidemiology data collection from 1992 and registry development and annual reports from 2009
- Participation in ERA-EDTA Registry NephroQUEST project 2007-2010

- www.nefro.ee/eng/
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Kidney health problems/inequalities

- Ageing population
- Expenditure on social protection of GDP
- Density of inhabitants of a given area
- Emigration
Problems

- Population ageing

Estonian statistics. A.Tammur: http://www.slideshare.net/Statistikaamet
Problems

Estonian population ageing

Estonian statistics. E.Tiit: http://www.slideshare.net/Statistikaamet/
### Problems

- RRT patients mean age

<table>
<thead>
<tr>
<th>Mean age</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD</td>
<td>59</td>
<td>60</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>64</td>
</tr>
<tr>
<td>PD</td>
<td>58</td>
<td>58</td>
<td>60</td>
<td>57</td>
<td>58</td>
<td>63</td>
</tr>
<tr>
<td>KTX</td>
<td>49</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>RRT: all</td>
<td>53.9</td>
<td>53.7</td>
<td>54.7</td>
<td>54.9</td>
<td>54.8</td>
<td>55.5</td>
</tr>
</tbody>
</table>

*Epidemiological Data of Kidney Diseases in Estonia Annual Report 2012*

[www.nefro.ee/eng/]
Problems

Prevalent RRT population 2012

Epidemiological Data of Kidney Diseases in Estonia Annual Report 2012
www.nefro.ee/eng/
Problems

- The inhabitants of a given area in Estonia
Problems

- RRT patients of a given area
Problems

HD units in Estonia

- Nephrology centers (big red circles),
- Satellite units (small white circles),
- HD units at regional hospitals (small red circles),
- Private HD units (big white circles) in Estonia
Problems

Expenditure on social protection of GDP (% of GDP) – Estonia is one of lowest in EU
Problems

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Source of Data Eurostat
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Problems

Estonian population emigration

- Estonian statistics. E.Tiit: http://www.slideshare.net/Statistikaamet/
Problems

Estonian population emigration > Finland

Estonian statistics. E.Tiit: http://www.slideshare.net/Statistikaamet/
More than half of the kidney transplant candidates awaiting transplantation are sensitized to HLAs.

**Problems**

RRT trends in Estonia 2000-2012 according to modality of treatment

- **TX**
- **PD**
- **HD**

**Epidemiological Data of Kidney Diseases in Estonia Annual Report 2012**
European organ exchange organizations

Scandiatransplant
UK Transplant
AdB, France
Swiss Transplant
Lusotransplante
ONT, Spain

Eurotransplant
Balttransplant
Poltransplant
Czechtransplant
Hungarotransplant
CNT, Italy
HNTO, Greece
Kidney health problems/inequalities

- Dialysis access especially in elderly patients depends from social security

- Expenditure on social protection of GDP low and we cannot organize all kind home therapies: no assisted PD, no home HD

- Physicians and nurses emigrate abroad and there is lack of specialists

- Estonia does not belong to any big European organ exchange organizations
Outline

• Introduction

• Kidney health developments in Estonia

• Kidney health problems/inequalities

• Future trends, challenges and expectations
Future trends, challenges and expectations

- RRT access inequalities in the Estonia – elderly, presensibilized patients
- Transplantation programs – harmonization in Europe. (EU members governments level)
- Kidney health programs in EU member countries
- European nephrology certification exam (UEMS) (Physicians come from third countries – we need a unified certification process in EU)
- Regional CME courses (Estonia is small to organize local CME courses)
- Scientific projects in EU region - information, collaboration, participation
Thank you for your attention!