NON-URGENT CARE AT PAEDIATRIC EMERGENCY DEPARTMENT OF UNIVERSITY HOSPITAL. WHAT INFLUENCES PARENTS’ DECISIONS?

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2013 09 20
Lyon
WHY IS IT IMPORTANT?

• In many countries emergency departments (ED) are facing an increase in demand for services, long-waits and severe crowding*

• In Lithuania over the past decade the number of children’s ED visits increased 2.7 times.

• Dramatic increases in ED use contribute to rising healthcare costs and decrease continuity of care**

• Parents bring their children to the ED for nonurgent care because of problems with their primary care provider and perceived advantages to ED care***.


Lithuania: 3 mln. population, 18.3 % children under 18y
Utilization of ED services for outpatient visits by children in Lithuania in 2001 – 2011 has increased 2.7 times!

ED visits by children in the past decade increases significantly in all age groups, mainly in younger groups (standardized data by 100 of children, all LT)

Data from National LT patient fund database
Vilnius University Children's Hospital (affiliate to VU hospital Santariskiu clinics) provides the highest level of secondary and tertiary level health care for newborns and childrens up to 18 years old.

728 beds
411 beds in the main campus in Santariskes (9 NICU, 12 PICU beds), day surgery, day care and palliative care beds are included;
50 TB beds
267 beds for child development, rehabilitation and sanatorium treatment

26 000 hospital admissions
200 000 outpatient visits

32 000 Emergency department visits
ED visits in VU Children’s hospital are more frequent in evening hours

<table>
<thead>
<tr>
<th>Time</th>
<th>Patients per hour</th>
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</thead>
<tbody>
<tr>
<td>Night (0 - 7 h.)</td>
<td>1 per hour</td>
</tr>
<tr>
<td>Work hours (8 – 15 h.)</td>
<td>4 per hour</td>
</tr>
<tr>
<td>Evening (16 – 23 h.)</td>
<td>6 per hour</td>
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About 30 % of all VUCH ED visits are primary care sensitive, non-urgent cases
In weekends and holydays in VU Children’s hospital are provided more ED visits per hour then in workdays.
AIM of SURVEY

To find out and understand the motivations and actions of parents of children with non-urgent injury or illness who attend University Children‘s Hospital ED
OBJECTIVES

- To explore if the accessibility of primary care service has influence on ED crowding.
- To identify influence of geographical distances to ED.
- To find out the main health problems for which patients attend ED and how parents rate them.
- To explore the connection between parent’s individual characteristics, child’s age and evaluation of child’s health.
METHODS

• A questionnaire-based survey of parents attended ED for non-urgent health problem, whose children were not hospitalized.

• The survey collected data of 512 parents who visited ED on January 2013.

• The questionnaire collected information showing demographic, socioeconomic, psychological factors, which could have influence on parents' choice to visit ED.

• Statistical analysis was made using MS Excel and SPSS21.0 statistic program. Results were analyzed using descriptive statistics methods, T test and chi square test.
CHARACTERISTICS OF PATIENTS AND PARENTS

- The age of children was approximately 5.3 years.
- 2/3 of children were younger than 7 years.
- Number of boys and girls were almost equal.
- Every fourth parent rated their child condition as moderate or bad.
- 4/5 of respondents answered, that they have high education.
- Groups of parents with high and low salaries were similar size.
Results

Who advised you to come to ED?

<table>
<thead>
<tr>
<th></th>
<th>Working day</th>
<th>Weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family doctor or other health specialist referral</td>
<td>60.0%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Parent's decision</td>
<td>40.0%</td>
<td>50.0%</td>
</tr>
</tbody>
</table>

$p<0.05$
Results

Did you visit family doctor before coming to ED?

- 54% were examined by family doctor
- 46% did not visit their doctor
Main reasons, why patients did not visit family doctor

- Non working hours
- There were no vacancies
- Long waiting list
- Primary care unit do not work on weekends
- Urgent problem/ disease, urgent care is needed
- Parents are not satisfied with their family doctor, always come to ED because of more professional care.
The most common symptoms

- Fever: 37%
- Pain: 21%
- Trauma: 20%
- Respiratory disorders (cough, dyspnea): 20%
- Digestive disorders (nausea, vomiting, diarrhea): 17%
- Anxiety: 10%
- Other: 16%

Results

% of all patients
Results

Symptoms and age

- Respiratory disorders
- Pain
- Trauma
- Fever

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Respiratory disorders</th>
<th>Pain</th>
<th>Trauma</th>
<th>Fever</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 - 17 yrs.</td>
<td>3%</td>
<td>37%</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>8 - 12 yrs.</td>
<td>11%</td>
<td>27%</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>3 - 7 yrs.</td>
<td>15%</td>
<td>24%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>1 - 2 yrs.</td>
<td>8%</td>
<td>10%</td>
<td>24%</td>
<td>52%</td>
</tr>
<tr>
<td>&lt; 1 yrs.</td>
<td>14%</td>
<td>19%</td>
<td>17%</td>
<td>36%</td>
</tr>
</tbody>
</table>

$p<0.05$
Sypmtoms and age

Results

Respiratory disorders  Pain  Trauma  Fever

13 - 17 yrs.
- 3%  13%  37%  45%

8 - 12 yrs.
- 11%  27%  34%

3 - 7 yrs.
- 15%  24%  39%

1 - 2 yrs.
- 8%  24%  10%

< 1 yrs.
- 14%  17%  36%

p<0.05
Results

Almost half of the parents (47.3%) rated their child’s condition as severe or very severe. Significant differences were found in child’s condition evaluation considering symptoms and age.

![Bar chart showing percentages for Fever, Trauma, and Respiratory disorders.]

- Fever: Easy and moderate (36%), Severe or very severe (64%)
- Trauma: Easy and moderate (72%), Severe or very severe (28%)
- Respiratory disorders: Easy and moderate (34%), Severe or very severe (66%)

*p<0.05*
Evaluation of child’s health has statistically significant association with their education and family income.

How do you assess your child's health in general?
CONCLUSIONS

• Parents choose hospital ED for non-urgent care more often on their own decision, when they can’t get an appointment at PC office on the same day.

• The distance to the hospital ED had no significant impact on frequency of attendance.

• Child's age and the reason of attendance to the hospital ED significantly influenced subjective evaluation of severity of the child's disease.

• Parents in lower education and lower income groups significantly more frequently rated child's condition as severe and very severe.
CONTINUITY

BETTER INFORMATION ABOUT HEALTH CARE SERVICES ORGANIZATION

It is very important to inform patients and their parents, where they can get primary care service and what to do in non working hours

BETTER PARENTS HEALTH LITERACY

Low parents health literacy may have a relationship with increased ED use in children. Targeted low literacy interventions can reduce ED utilization*

INTERVENTION OF AUTHORITIES IS NEEDED

Authorities need to pay more attention to this problem – PC office access, efficiency, experiences, and appointment scheduling should be improved**


Thank you

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