Mental and psychosocial health in Hungary

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Hungary
Topics of the lecture

1. Socio-economic situation in Hungary

2. Hungarostudy research: 2002 and 2006: goals and methods

3. Results of this study

4. Explanation of the results

5. Mental and psychosocial health in childhood: the HBSC study

6. Social and health services which develop the mental and psychosocial health in childhood

7. One example: Child and Adolescent Psychiatric Outpatient Department in Pécs
The regions of Hungary

20 regions which are the 19 **counties** and the capital city **Budapest**
23 towns with county's rights

Total area: 93030 km²
Population: 9 942 000
Capital city, Budapest
Castle of Buda

Capital city, Budapest
The Parliament with the Danube
Pécs, Ancient Christian Burriel Chappels
Pécs

Turkish Mosque at the Széchenyi Square

Cathedral
Socio-economic situation in Hungary
### Source: OECD Health Data, 2012

<table>
<thead>
<tr>
<th></th>
<th>Hungary</th>
<th></th>
<th>Finland</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
<td>2010</td>
<td>2006</td>
<td>2010</td>
</tr>
<tr>
<td><strong>Total health expenditure: % of GDP</strong></td>
<td>8,3</td>
<td>7,8</td>
<td>8,3</td>
<td>8,9</td>
</tr>
<tr>
<td><strong>Physicians density per 1000 population</strong></td>
<td>3,0</td>
<td>3,3</td>
<td>3,0</td>
<td>2,9</td>
</tr>
<tr>
<td><strong>Total hospital beds per 1000 population</strong></td>
<td>7,9</td>
<td>7,2</td>
<td>7,0</td>
<td>7,9</td>
</tr>
<tr>
<td><strong>Psychiatric care beds per 1000 population</strong></td>
<td>0,4</td>
<td>0,3</td>
<td>0,9</td>
<td>0,8</td>
</tr>
<tr>
<td><strong>Life expectancy female pop. at birth, years</strong></td>
<td>77,4</td>
<td>78,1</td>
<td>83,1</td>
<td>83,5</td>
</tr>
<tr>
<td><strong>Life expectancy male</strong></td>
<td>69,0</td>
<td>70,5</td>
<td>75,9</td>
<td>76,9</td>
</tr>
<tr>
<td><strong>Life expectancy total pop.</strong></td>
<td>73,2</td>
<td>74,3</td>
<td>79,5</td>
<td>80,2</td>
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<tr>
<td></td>
<td>Hungary</td>
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<tr>
<td></td>
<td>2006</td>
<td>2010</td>
<td>2006</td>
<td>2010</td>
</tr>
<tr>
<td>Infant mortality (deaths per 1000 live birth)</td>
<td>5.7</td>
<td>5.3</td>
<td>2.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>7.4</td>
<td>11.2</td>
<td>7.7</td>
<td>8.5</td>
</tr>
<tr>
<td>Intentional self-harm death per 100 000 population</td>
<td>23.4</td>
<td>23.3</td>
<td>19.6</td>
<td>17.3</td>
</tr>
<tr>
<td>Alcohol consumption (liters per capita age 15+)</td>
<td>13.2</td>
<td>11.5</td>
<td>10.1</td>
<td>9.7</td>
</tr>
<tr>
<td>Obesed population, measured % of total population</td>
<td>28.5</td>
<td></td>
<td>20.2</td>
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</tbody>
</table>
Central-Eastern-European health paradox

- 1960: vast majority of the population lived at similarly low level, there were no mortality differences between socio-economic strata.
- Widening socio-economic gradient in mortality.
- Mortality rates continued to decline in Western Europe, increase in Hungary, especially among middle-aged men:

  Mortality rate for 1000 men

  1960: 12.2
  2005: 16.02 increasing = 33%
Among women mortality rate decreased.

Cardiovascular mortality accounts for the majority of this excess mortality.

Male/female differences in life expectancy 8.3 years (2004).

Mortality rate comparing the lowest to highest educational stratum:

1.8 for males
1.2 for females

Since the late 1980s, the mortality rates among 45-64 year old men in Hungary has risen to higher levels than they were in the 1930s.
Mortality rate in 1000 men in corresponding age groups in the Hungarian population (Demographic Yearbook, 2005)

Source: Kopp, M, Skrabski Á: Depression predicts male premature mortality, 14th AEP Section Epidemiology and Social Psychiatry
Hungarostudy research: 2002 and 2006: goals and methods
National representative surveys in Hungary: Hungarian Epidemiological Panel

- The samples represent the Hungarian population above age 18, according to gender, age, county and subregions

- **Hungarostudy:** 1983: 6000 persons
  
  1988: 20 092 persons
  
  1995: 12 463 persons
  
  2002: 12640 persons
  
  2006: follow-up study: among the 12,640 persons in Hungarostudy 2002 4689 persons were interviewed again, 322 persons deceased
Measures

1. **Socioeconomic Factors**
   - Education
   - Occupational class
   - Personal and household income
   - Subjective social status

2. **Work-related stress factors**
   - Control available at the workplace
   - Job security
   - Dissatisfaction with the job
   - Social support from colleagues
Measures

3. **Mental health factors**
   - Depressive symptoms (Beck Depression Inventory, shortened version)
   - Self-efficacy score
   - Anxiety (Hospital Anxiety Score)
   - Type D personality (Dennollet, 2000: negative affect, behavioral inhibition)
   - Hopelessness (Shortened Hopelessness Score, Beck, 2000)
   - WHO Wellbeing
   - Social support
Measures

4. Health behaviour
   - Smoking history
   - Suicidal behaviour
   - Physical activity
   - Alcohol abuse
   - Body weight and height: BMI
   - Drug consumption
Results of this study
Middle-aged sample: predictors of early death

Hungarostudy 2002:

- 1130 men
- 1529 women

Were between the age of 40-69. From this group 99 men (8.8%) and 53 women (3.5%) died till 2006.
Middle-aged sample: predictors of early death

Among men:

- Depression, especially severe depression
- Anxiety
- Self-rated health, especially self-rated disability
- Work-related factors: job insecurity, low control in work, low personal and family income, low employment grade
- No meaning in life, hopelessness
- Low education
- Subjective poverty, subjective social status
Middle-aged sample: predictors of early death

Among women:

- Dissatisfaction with personal relations, family problems, social support at work
- Family related socioeconomic measures (no car in the family)
Explanation of the results
Chronic stress and depression

- Hungary: „masculine” society: assertive and competitive.

- Men accept: they are responsible for the economic situation of the family. Unfavourable social and economical changes is a more important stressor for men, than for women.

- Poor socioeconomic situation in itself does not cause higher morbidity rates, only through the mediation of depressive symptoms. The subjective experience of relative disadvantage, the prolonged negative emotional state, that is chronic stress proves to be the most important health risk factor.
Chronic stress and depression

Poor socioeconomic situation

Depression

Self-rated morbidity (sick)
Chronic stress and depression

- Severe depression increased between 1988 and 1995 from 2.7% to 7% in the total population.
- Between 2002 and 2006 increased severe depression among men and women too, but with higher proportion among men.
Depressive symptomatology (BDI) severity categories in the Hungarian population

Source: Kopp, M, Skrabski Á: Depression predicts male premature mortality, 14th AEP Section Epidemiology and Social Psychiatry
Depressive symptomatology (BDI) severity categories according to Hungarostudy 2006 follow-up study between 2002 and 2006 among men

Source: Kopp, M, Skrabski Á: Depression predicts male premature mortality, 14th AEP Section Epidemiology and Social Psychiatry
Depressive symptomatology (BDI) severity categories according to Hungarostudy 2006 follow-up study between 2002 and 2005 among women.

Source: Kopp, M, Skrabski Á: Depression predicts male premature mortality, 14th AEP Section Epidemiology and Social Psychiatry
Goals of the Survey

- Study the patterns of health among young people in 41 countries and regions across Europe and North America.
- Report on health, health-related behaviour and the social contexts of young people’s health.
- Inform and influence policy and practice and contribute to health improvement for all young people.
Methodology

HBSC study has to be conducted according to the internationally developed and approved research protocol.
Selecting age groups of pupils with 11 (1877), 13 (1903) 15 (2243), 17 (2091)-year-old age group,
5th, 7th, 9th and 11th grade students were considered as target population in this study.
Current analyses were done within the Hungarian nationally representative sample.
Methodology

- Data collection: in the classrooms, with anonymous self-reported questionnaires
- 416 classes of 358 schools
- Strata were created by geographical regions, by settlement size, by secondary school type
- School types were: grammar school, technical college, vocational school
- Cleaned sample contains 8096 questionnaires
Results: physical activity and sedentary behaviour

- Physical activity: has a positive effect on mental health, mental performance, social relationship.
- School-aged children: devote much more time on physically passive activities than active ones.
- More than half of the students, 58.2%, watch TV at least two hours a day on schooldays and 82.7% in the weekend.
- 17.3% of the pupils do exercise regularly for at least 60 minutes in a day. Rates decrease sharply approaching grade 11.
Results: physical activity and sedentary behaviour

How many days did they physical activity: over the past week: 11, 13, 15, 17 year-old age groups, girls and boys (n=7955)

At least 60 minutes physical activity, at the day, %

Source: Serdülőkorú fiatalok egészségmagatartása és életmódja, OGYI, 2011.
Results: tobacco smoking

- The age of the first trial is very important: the earlier the young people start smoking the greater chance they have got to become a regular smoker in adulthood.
- Most of the students in grade 9 have their first cigarette at the age of 13-14.
- Smoke at least once a week: 21%
- Smoke on daily basis: 16.8%
- Daily users among current smokers: 63.4%
- Significant differences between secondary school-types: indicators of students attending vocational schools are much less favorable than those of students from grammar schools and technical colleges.
Results: alcohol consumption

- Have already consumed alcohol at least once in life: 72.2%:
- Gender differences in all ages: number of girls who drink alcohol at least once a week is much lower than those of boys.
- Have never been drunk in life: 53.1%
- Age of first drunkenness is age of 14 among 9th grade boys, 14 and 15 years among 9th grade girls and 16 years among 11th grade students.
- Most respondents first tasted an alcoholic drink around the age of 14 years, boys earlier than girls.
- Indicators of drinking behaviour are much higher among vocational school students than those of students from grammar schools and technical colleges.
- The shares of alcohol consumption by young people in Hungary show an average number in comparison with other European countries.
Results: illegal drog consumption

- 9th and 11th grad students: 30.7% has already tried illegal drugs, or abused medicines or inhalants in their life.
- Most students: experimental drug users.
- **Cannabis** is the most popular drog, the second most popular substance use is abuse of medicine.
- Last year prevalence of cannabis use is 15.8% in the whole sample.
- Indicators of the drug using are much higher among vocational school students than those of students from grammar and technical schools.
- Results show higher prevalence of cannabis use in secondary school students, comparing to previous surveys.
Results: illegal drug consumption

Cannabis use prevalence in the last month among the different type of drug users among the 9th and 11th grade pupils

<table>
<thead>
<tr>
<th>User Type</th>
<th>Rate of Users (%)</th>
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</thead>
<tbody>
<tr>
<td>Social-recreational</td>
<td>7.5</td>
</tr>
<tr>
<td>Situational user</td>
<td>2.4</td>
</tr>
<tr>
<td>Intensive user</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Source: Serdülőkorú fiatalok egészségmagatartása és életmódja, OGYI, 2011.
Results: sexual behavior

- 40.6% of the pupils of 9th and 11th grade have had sexual intercourse

The pupils who have already had sexual intercourse (N=4552)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Sexually active pupils%</th>
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<tbody>
<tr>
<td>9th grade</td>
<td>32.8 Fiúk, 22.2 Lányok</td>
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<tr>
<td>11th grade</td>
<td>51.4 Fiúk, 54.9 Lányok</td>
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</table>
Results: sexual behavior

- Beginning of sexual activity shows **acceleration**: 50% of sexually experienced children attending grade 9 started sexual activity at the age of 14 or before, while just 20% of students of grade 11 started sex at this age.
- Compared to the 2006 data a slight increase was observed in the rate of children obtaining their first sexual experience at the age of 11 or before.
Results: subjective well-being

HBSC Symptom Checklist

- Girls had higher scores than boys
- Among girls scores increased with age
- Frequent (more times a week) psychological symptoms more pronounced among girls and older students:
  Irritable bad temper
  Feeling low
  Nervous
  Pain symptoms: frequent backache
Results: subjective well-being

- **Frequent somatic symptoms**: Sleeping problems, Pain in the head, stomach, back, Tiredness (50% of the students in 11th grade)
- **General life satisfaction**: Significant decline in levels of life satisfaction between grade 5 and 11.
Results: subjective well-being

• Depression
Scores on shortened version of Child Depression Scale, gender differences (N=4944)
Four or more points may indicate depressive mood
Girls scored significantly higher than boys

Proportion of the students (%)

<table>
<thead>
<tr>
<th>Scores reached on Child Depression Scale</th>
<th>Proportion of Students (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 point</td>
<td>Fiúk: 58.3, Lányok: 48.5</td>
</tr>
<tr>
<td>2-3 point</td>
<td>Fiúk: 22.6, Lányok: 26.0</td>
</tr>
<tr>
<td>4-16 point</td>
<td>Fiúk: 19.0, Lányok: 25.6</td>
</tr>
</tbody>
</table>
Results: school, bullying, peer relations

- **Liking the school**: among students attending vocational schools significantly less respondents like their school very much than among students of grammar and technical schools.

- **Bullying**: two-third of the students are not exposed to bullying, 15% are perpetrators, 13% are victims, 10% are both participating in and suffering bullying.

- **More boys** are perpetrators, bully-victims and those who are not exposed to bullying at all.

- In older age groups: prevalence of bullying is sign. lower.

- **Vocational schools**: sig. more perpetrator and victim-type children.
Social and health services which develop the mental and psychosocial health in childhood.
Children and adolescent mental health care/specialists

- **Pediatricians**
  - Healing the physical diseases

- **Health visitor**
  - Helping the development of child

- **Special education teacher**
  - Develop the mentally disabled children

- **Child psychiatrist**
  - Psychological problems and psychiatric disorders

- **Child psychologist**

- **Social worker**
Children and adolescent mental health care/institutions

- **Child psychiatric clinical department**: 3 in Hungary
- **Child psychiatric outpatients’ department**: in every county
- **Educational consultation**: schooling problems
- **Child welfare services**: financial and psychological help to children of disadvantaged family
- **Private practices**: child psychiatrists and child psychologists
The Vadaskert Child Psychiatry Hospital and Outpatient Clinic
The Vadaskert Child Psychiatry Hospital and Outpatient Clinic

Since 1993 three inpatient units, with 40 beds, and a capacity of 20 day-care patients.

It is maintained by a foundation, but is financed by the National Health Insurance Institute.

Last year the Outpatient Clinic had 1400 new patients, and provided care to both children and adults in nearly 14,000 visits.

It manages the medical, educational and social problems of psychologically ill children within one institution.
At the ward called MÉHKAS ("BEEHIVE"), inpatient psychotherapeutic groups are organized for youths (10-18 years of age) with similar psychopathology:

- ADHD, eating disorders, anxiety problems, OCD, Tourette Syndrome, learning disabilities, mood disorders
- The disorder-specific treatment programs take one or two weeks and contain:
  - cognitive-behavioral methods, social skill training for children
  - parental consultations at the beginning and at the end of the programs. Parental psycho education includes introducing to the nature of the disorder and the possible management of related problems.
Child and Adolescent Psychiatric Outpatient Department in Pécs
Some data about the Outpatient Department

- Functioning as part of the Outpatient Clinic in Pécs, in the same building with other outpatient departments
- It was founded in 1957
- Provided region: first of all Pécs, and Baranya county, but some patients come from other areas of Southern Transdanubia
- Focus age-group: 0-18 years
Experts in the Outpatient Department

- 5 child psychiatrists
- 3 clinical child psychologists and 2 psychologists
- 1 mental health specialist
- 2 special education teachers
- 2 psychiatric assistants/receptionists

Some of the psychiatrists/psychologists have cognitive-behavioral or integrative psychoterapeutic qualifications.
Relationships of the Outpatient Clinic:

- Signaling the problems and referring the patients
- Collaborating with them in treatment in cases

Outpatient clinic

- Kindergartens, schools
- Pediatricians health visitors
- Child welfare services: social workers
- Hospitals and clinics
- Educational consultation
Types of the problems

- Preschool children: difficulties of a mother-child relationship, delay of psychomotor or mental development,
- School-aged children: ADHD, anxiety disorders (separation anxiety, schoolphobia), conduct disorders, learning disabilities, affective disorders
- Adolescence: OCD (obsessive-compulsive disorder), anxiety disorder, depression, alcohol or drug abuse, eating disorders (anorexia nervosa, bulimia nervosa)
- Family problems: divorce, death, existential crisis, child abuse
Everyday work in the Outpatient Clinic

**Registration**
- mostly on telephone or personally: parent or member of the "signaling-system"
- psychiatrist: fixing an appointment

**Exploratory interview**
- psychiatrist: performing it with parent and child
- after it discussion with psychologist or/and special education teacher

**Diagnostic process**
- psychiatrist: biographical and family analyses with parents
- psychologist: psychodiagnostic methods with the child: drawing and playing tests, rating scales, mental abilities tests
- special education teacher: learning abilities
Everyday work in the Outpatiant Clinic

Other methods
- Mental health specialist: observing the child in kindergarten, school, or at home, consulting with teachers about problems.

Diagnosing
- Psychiatrist, psychologist: discussing with the parent or with the parent and adolescent the results of the diagnostic process and the possible therapies.

Therapy
„World-play“ – a playing test

A room in the Outpatient Clinic
„Draw a tree!“- a drawing test

„Draw your family!“- a drawing test
# Forms of therapy

<table>
<thead>
<tr>
<th>Individual forms</th>
<th>Psychoterapeutic groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Psychiatrist: parental consultations, pharmacotherapy (when needed), psychotherapy with adolescents</td>
<td>• Group for adolescents with different problems: develop social skills, self-efficacy, self-knowledge</td>
</tr>
<tr>
<td>• Psychologist: play or art-therapy, cognitive-behavioral therapy, supportive therapy</td>
<td>• Art-therapy group for preadolescents with anxiety disorders</td>
</tr>
<tr>
<td></td>
<td>• Psychoeducational group for parents of children with ADHD</td>
</tr>
</tbody>
</table>
Group-forming task: together on the island

Working with symbols: the door
Other activities

1. Case-discussing group with the specialists of other Institutes.
2. Participation in comprehensive research:
   - International study about depression
   - Multicentered research on the pharmacotherapy of ADHD
3. Participation in trainings and in postgraduate courses.
Summary of presentation

- In Hungary has been increasing the interest in mental health since 1990.
- There are more and more social, educational and health services which contribute to developing mental health.
- Problems: not enough specialists, services cannot cover all of the regions of Hungary.
Summary of presentation

- One solution would be: postgraduate trainings for the teachers, special education teachers, counselors, priests, nurses and other professionals who can help people.
- Faculty of Health Sciences University of Pécs: „health promotion mental health training”
- Faculty of Arts and Humanities University of Pécs „mental health professionals and community support"

Students gain qualifications in 4 semesters training.