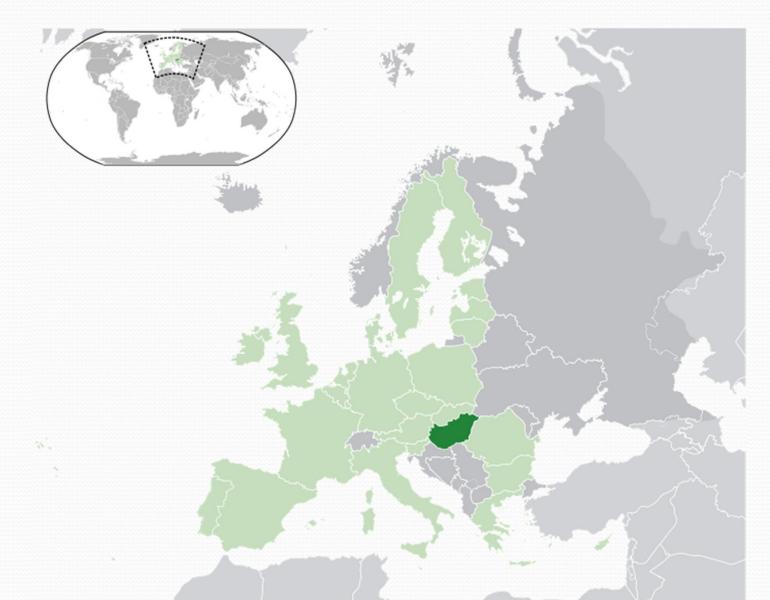
# Mental and psychosocial health in Hungary

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### 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

# Hungary in Europe



# 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 km<sup>2</sup>

#### Population:

9 942 000



Capital city,
Budapest
Castle of Buda

Capital city, Budapest
The Parliament with the
Danube



### Pécs, Ancient Christian Burriel Chappels













# Socio-economic situation in Hungary

#### Source: OECD Health Data, 2012

	Hungary		Finland	
	2006	2010	2006	2010
Total health expenditure: % of GDP	8,3	7,8	8,3	8,9
Physicians density per 1000 population	3,0	3,3	3,0	2,9
Total hospital beds per 1000 population	7,9	7,2	7,0	7,9
Psychiatric care beds per 1000 population	0,4	0,3	0,9	0,8
Life expectancy female pop. at birth, years	77,4	78,1	83,1	83,5
Life expectancy male	69,0	70,5	75,9	76,9
Life expectancy total pop.	73,2	74,3	79,5	80,2

	Hungary		Finland	
	2006	2010	2006	2010
Infant mortality (deaths per 1000 live birth)	5,7	5,3	2,8	2,3
Unemployment rate	7,4	11,2	7,7	8,5
Intentional self-harm death per 100 000 population	23,4	23,3	19,6	17,3
Alcohol consumption (liters per capita age 15+)	13,2	11,5	10,1	9,7
Obesed population, measured % of total population		28,5		20,2

# "Central-Eastern-European health paradox"

- 1960: vast majority of the population lived at similarly low level, there were no mortality differences between socioeconomic strata.
- Socio-economic situation: growing polarisation between 1960 and 1990.
- Widening socio-economic gradient in mortality.
- Mortality rates continued to decline in Western Europe, increase in Hungary, especially among middle-aged men:

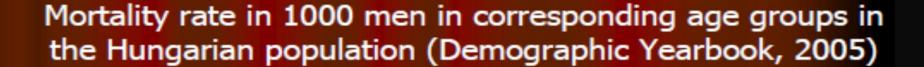
Mortality rate for 1000 men

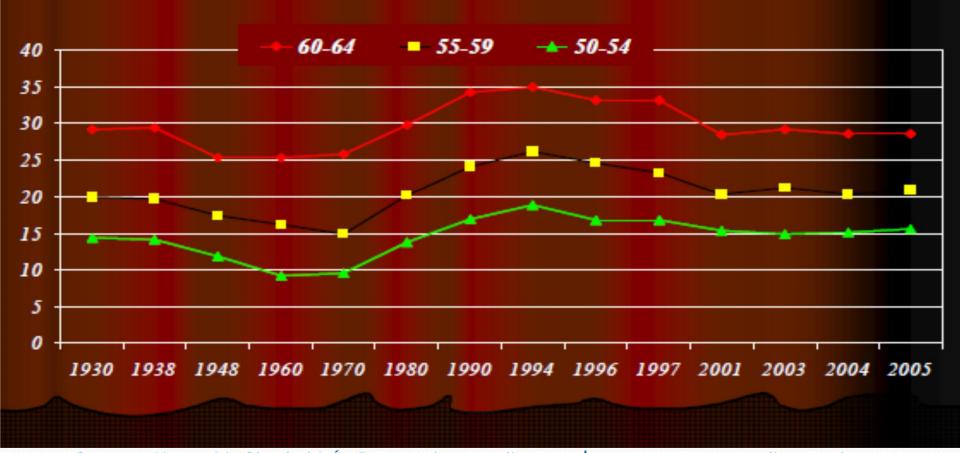
1960: 12.2

2005: 16.02 increasing=33%

# "Central-Eastern-European health paradox"

- 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.





# 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: 1 2640 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 collegues

### Measures

- 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
- Drog 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%)

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

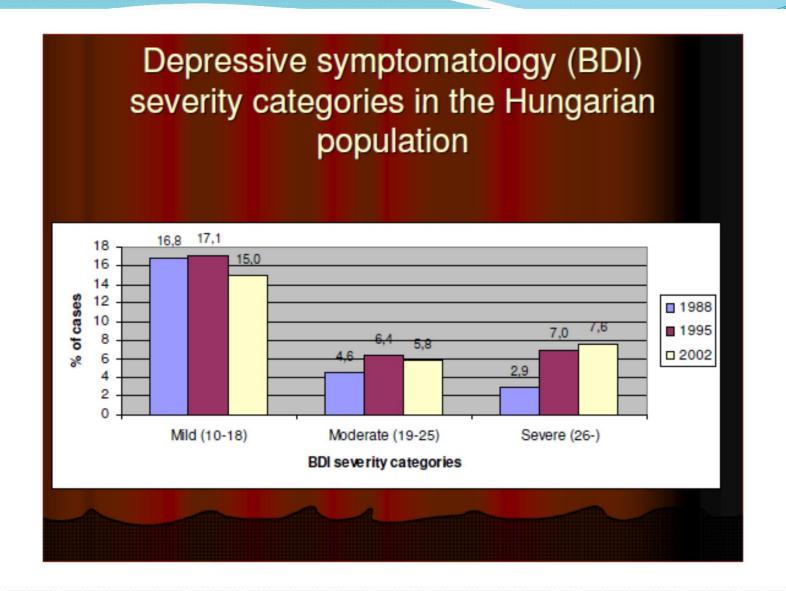
Poor socipeconomic situation

Depression

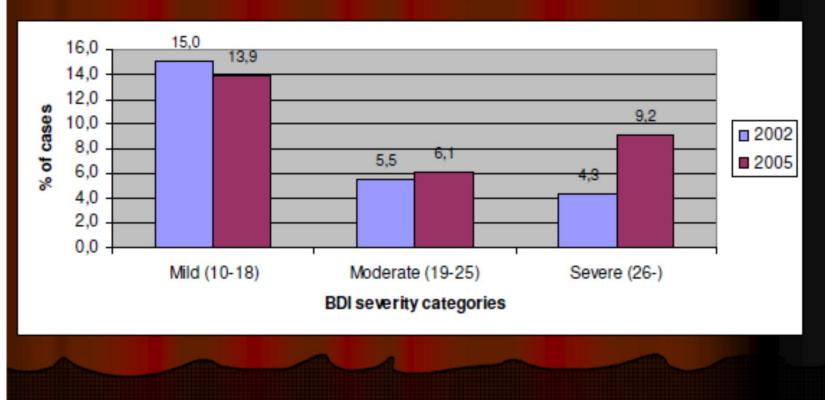
Self-rated morbidity (sick)

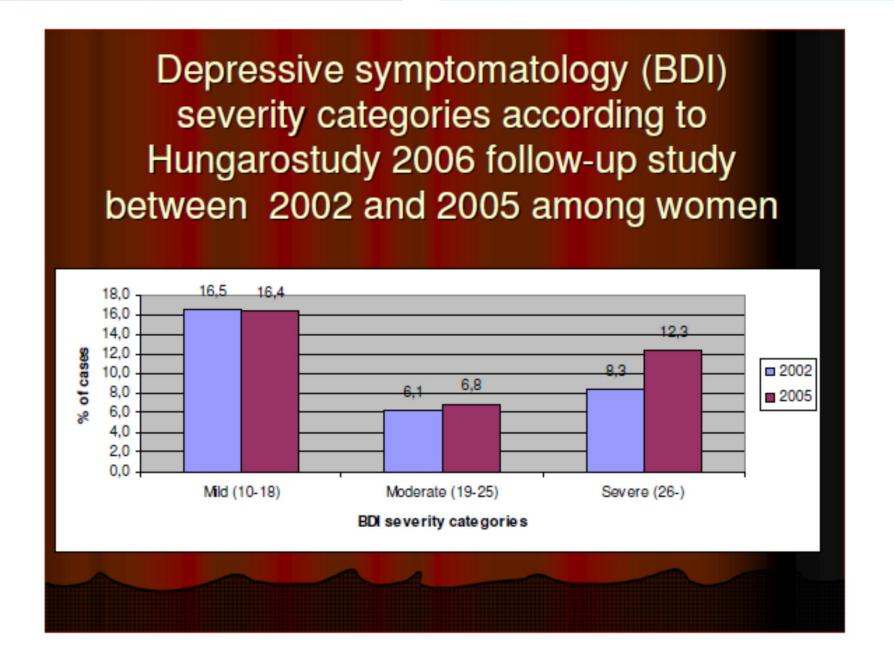
### Chronic stress and depression

- 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 according to Hungarostudy 2006 follow-up study between 2002 and 2006 among men





# Health Behavior in School-Aged Children (HBSC) 2010

WHO-Collaborative Cross National Study National Report Hungary: National Institute of Child Health (OGYEI) Budapest

### 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)-yearold 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

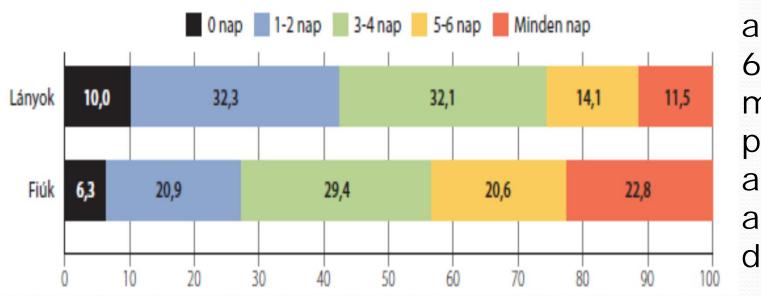
- Data collection: in the classrooms, with anonymous self-reported questionnaires
- 416 classes of 358 schools
- Strata were created by geographical regions, by settlement size, by secondary school type
- School types were: grammar school, technical college, vocational school
- Cleaned sample contains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

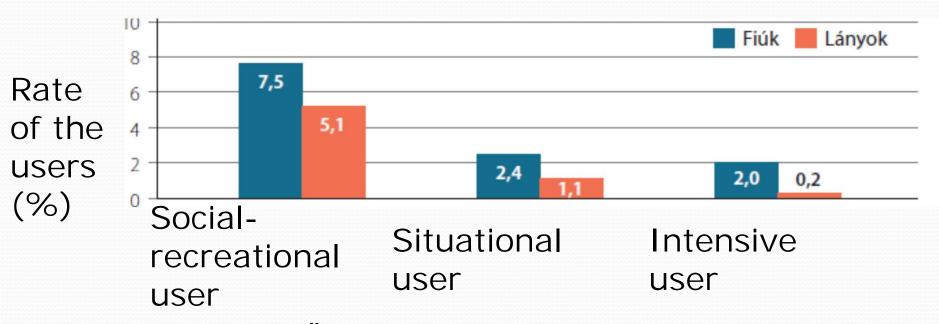
- Have already consumed alcohol at least once in life: 72.2%:
- Gender differences in all ages: number of girls who drink alcohol at least once a week is much lower, than those of boys.
- Have never been drunk in life: 53.1%
- Age of first drunkenness is age of 14 among 9th grade boys, 14 and 15 years 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 drogs, 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 drog consumption

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

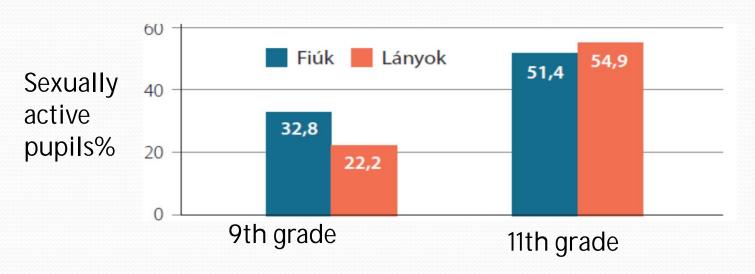


Source: Serdülőkorú fiatalok egészségmagatartása és életmódja, OGYI, 2011.

#### 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)



#### 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.

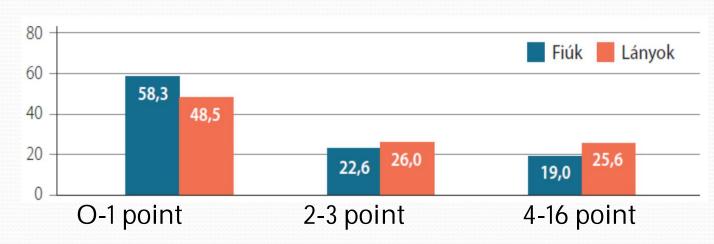
## Results: subjective well-being

#### 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 (%)



Scores reached on Child Depression Scale

# 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

Child psychologist

Social worker

Psychological problems and psychiatric disorders

# 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

# The Vadaskert Child Psychiatry Hospital and Outpatient Clinic/inpatient ward

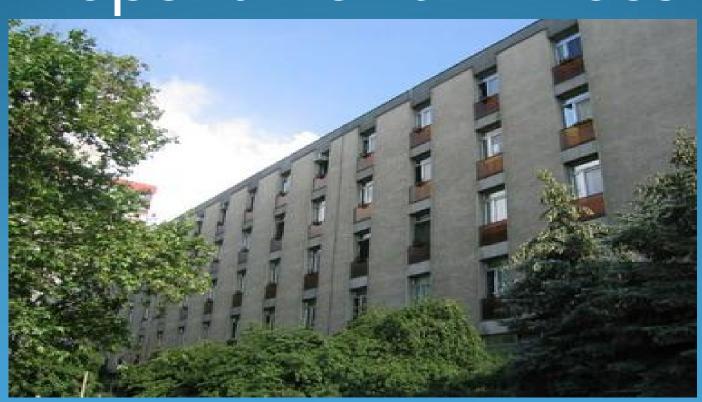


At the ward called MÉHKAS ("BEEHIVE"), inpatient psychotherapeutic groups are organized for youths (10-18 years of age) with similar psychopathology:

- 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

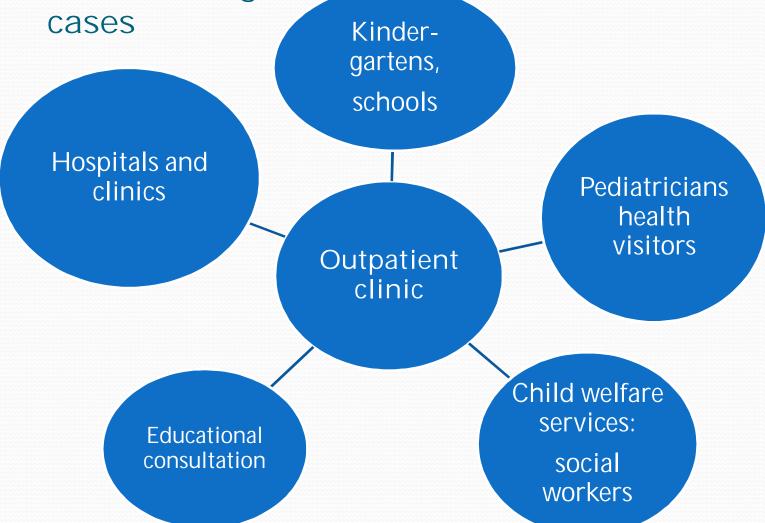
- 5 child psychiatrists
- 3 clinical child psychologists and 2 psychologists
- 1 mental health specialist
- 2 special education teachers
- 2 psychiatric assistants/receptionists

Some of the psychiatrists/psychologists have cognitivebehavioral or integrative psychoterapeutic qualifications.

#### Relationships of the Outpatient Clinic:

Signaling the problems and referring the patients

Collaborating with them in treatment in



#### 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 drog abuse, eating disorders (anorexia nervosa, bulimia nervosa)
- Family problems: divorce, death, existential crisis, child abuse

# Everyday work in the Outpatiant Clinic

Regis tration

- 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



A room in the Outpatient Clinic

a playing

"World-play" – a playing test

"Draw a tree!"-a drawing test



"Draw your family!" - a drawing test



## Forms of therapy

#### Individual forms

- Psychiatrist: parental consultations pharmacotherapy (when needed), psychotherapy with adolescents
- Psychologist: play or arttherapy, cognitivebehavioral therapy, supportive therapy

#### Psychoterapeutic groups

- Group for adolescents with different problems: develop social skills, selfefficiacy, self-knowledge
- Art-therapy group for preadolescents with anxiety disorders
- Psychoeducational group for parents of children with ADHD



Group-forming task: together on the island

## Group for adolescents

Working with symbols: the door



#### Other activities

- 1. Case-discussing group with the specialists of other Institutes.
- 2. Participation in comprehensie 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.