

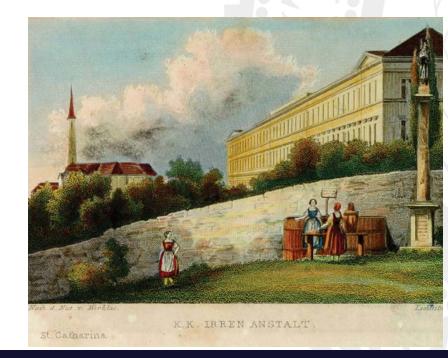
#### prof. MUDr. Jiří Raboch, DrSc.

Department of Psychiatry, First Faculty of Medicine, Charles University and General University Hospital in Prague





### PSYCHIATRY AND SOCIETY





## **MENTAL DISORDER**

Is a syndrom characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. **DSM-5, 2013** 

## LIFETIME PREVALENCE- NCS-R

MENTAL DISORDERS	%	Age of onset (median )
<b>U.S.</b>		
Affective disorders	20.8	30
Anxiety disorders	28.8	11
Addictive Diseases	14.6	20
Behavioural disorders	24.8	11
Mental disorders	46.4	14

Kessler et al., 2005

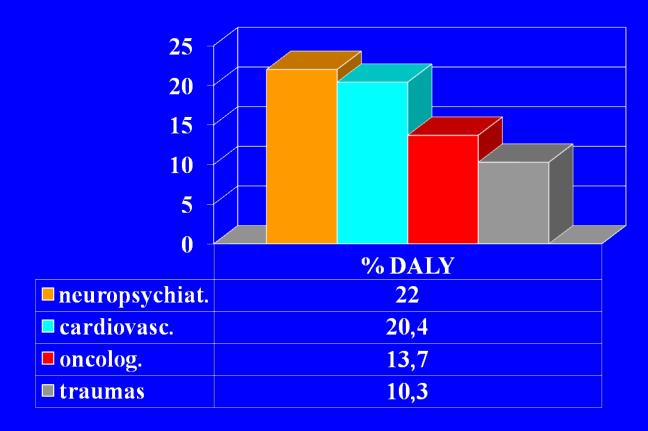
### NUMBER OF FIRST EXAMINATIONS IN PSYCHIATRIC OUTPATIENT DEPARTMENTS

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DIAGNOSIS	1994	2011	CHANGES (%)
ORGANIC DISORDERS	27 421	67 414	246
ADDICTIONS	31 097	44 569	143
SCHIZOPHRENIA	33 805	45 519	135
AFFECTIVE DISORDERS	37 915	102 671	271
NEUROTIC DISORDERS	103 577	215 634	208
DEVELOPMENTAL DISORDERS IN CHILDHOOD	23 460	27 339	117
TOTAL	307 877	556 456	181

ÚZIS 2012

## WHO, WB: BURDER OF DISEASE (DALY) DEVELOPED COUNTRIES



Murray a Lopez, 1996



## **PSYCHIATRY – MEDICAL SPECIALTY** natural history knowledge, philosophical views **TWO TRENDS**

### **RESTRICTIVE** (PUNISHING)



Obr. 1. "Hydrotersgie" u dulevné nemocných. Dřevoryt a XVI. století (Foto: Bayer Leverkusen.)

 SPET SCANS OF SHTLA RECEPTOR DEHETY

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PERMISSIVE (HEALING, MEDICINALISATION)

# **PSYCHIATRY AND MANKIND**

- MAGICAL CAUSES OF MENTAL DISORDERS – INTERVENTIONS BY SUPERNATURAL FORCES, e.g. OBSESSION BY EVIL SPIRITS
- MENTAL DISEASE AS MARK OF SIN, MORAL IMPURITY - INCANTATION, PRAYERS, PUNISHMENT
- FOLK MEDICINE HEALERS, SHAMANS, PRIESTS, TEMPLE MEDICINE (ASKLEPIEIONS), PHYSICIANS



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## MENTAL DISEASES AND MANKIND

- OLDEST MEDICAL DOCUMENTS -EBERS PAPYRUS 1500 BC, OBSESSION, INCANTATION AGAINST EVIL SPIRITS
- BIBLICAL DESCRIPTIONS OF MENTAL DISORDERS, E.G. THE OLD TESTAMENT, THE MADNESS OF THE KING SAUL (1000 – 985 BC) - SEVERE DEPRESSION (BAP), DAVID – HARP PLAYING



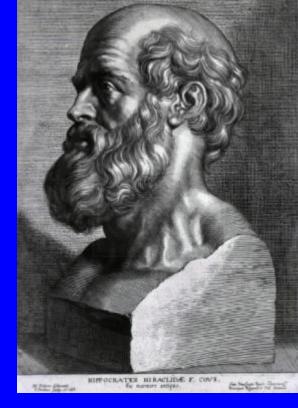
... and it came to pass, when the evil spirit from God was upon Saul, that David took a harp, and played with his hand: so Saul was refreshed, and was well, and the evil spirit departed from him.

1 Samuel, Chapter 16:23



### HIPPOCRATES (460 – 370 B.C.)

- 4 BODILY HUMORS SANGUIS, CHOLE, MELON CHOLE, PHLEGMA
- FIRST TYPOLOGY SANGUINE, CHOLERIC, MELANCHOLIC, PHLEGMATIC
- MENTAL DISEASE IMBALANCE OF BODILY HUMORS IN THE BRAIN
- PARANOIA MELANCHOLIA, MANIA, PHRENITIS x HYSTERIA
- THERAPY VENIPUNCTURE, EMETICS, LAXANTIVES, SWEATING ...





## **ROMAN EMPIRE**

- CORNELIUS CELSUS (25 BC 50 AD), DE MEDICINA
- CLAUDIUS GALEN (129 200 BC), SCHOOL OF ECLECTICS, CORPUS GALLENICUM
- 476 AD FALL OF THE WESTERN EMPIRE - DECLINE OF THE HUMANISTIC AND SCIENTIFIC EDUCATION IN EUROPE
- CODEX THEODOSIANUS (438 AD) MENTAL DISORDERS SEPARATED FROM MEDICINE, SUBJECT OF RELIGIOUS EVALUATION, PERSECUTION OF "MANIACS"







### **MIDDLE AGES**

SINCE **SCHO** DOGN BASE PROT **THE N** CONV DEMO INSAN **DIAB**( MALLEVS MALEFICA-RVM, MALEFI (as, & earum hærefim, vt ). Magn phramea potentifsima Jiefse conterens. 1600

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ION, GMATA

1487 N (CATHOLIC CLENG HULL SANDB SPRENGER AND HEINRICH KRAEMER)
EXORCISM, WITCH TRIALS (NORTHERN MORAVIA 1650 to 1680) **CORNELIUS CELSUS** (14 BC - 37 AD) **De medicina** 

Fame, vinculis, plagis coercendus est insanus The mentally ill must be coerced by starvation, fetters and flogging





### **REFORM EFFORTS**

- 15th CENTURY ASYLUMS OUTSIDE CONVENTS
- **BETHLEHEM (GB), SPAIN**
- RENAISSANCE, RETURN TO HUMANISM
- PROPERTIES OF THE MIND ARE AGAIN ASSOCIATED WITH THE BODY AND SOCIAL INFLUENCES
- 1st PSYCHIATRIC REVOLUTION, J. WEYER (1515 – 1588), COURT DOCTOR TO DUKE WILLIAM THE RICH FROM CLEVES, DE PRESTIGIIS DAEMONUM -MENTAL DISORDERS – MEDICAL CAUSES



EFFIGIES IOANNIS WIERIANNO ETATIS LX SALVTIS M.D.LXXVI

D E PRAESTIGIIS DAEMONYM, ET INCAN

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Authore TOANNE VVIERO GRAVIANO, Iliufirifimi Ducis Clinie, Iulie, Orc. Medico.

Przese locupletem secefiionis cumulum, ut ledonis memorae cosfuleretur, in Capita quoque iam fedus en quiliber Liber : cuus Argumentum in Przfatione comperies.

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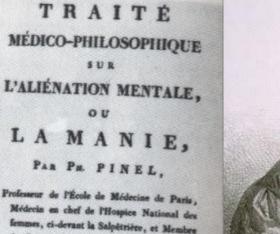
EASILEAE, PER IOANnew Operinant. 1164.

### ENLIGHTENMENT

the rationalism, the logic and t

- VOLTAIRE, HOLBACH, HELVETIUS, DIDEROT, LAVOISIER, CABANIS
- 2nd PSYCHIATRIC REVOLUTION

   REAL REFORM
   OF THE CARE OF
   MENTALLY ILL PEOPLE
- FRENCH REVOLUTION (1789)



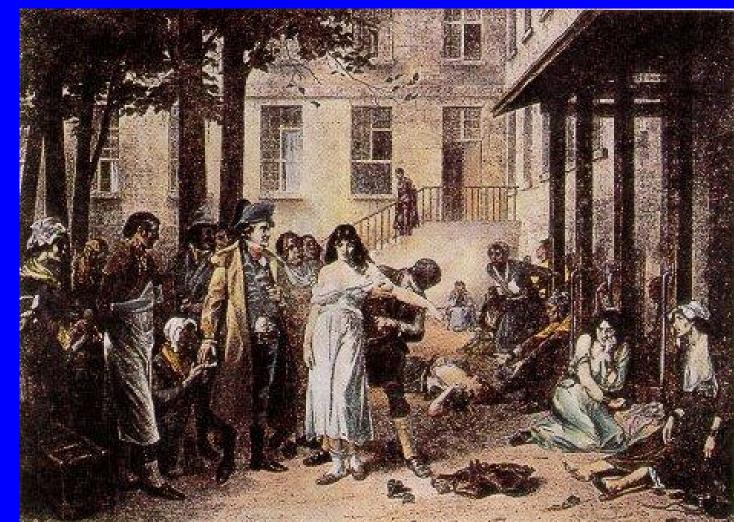




- PHILLIPE PINEL BICETRE (1793, MEN) SALPETRIERE (1795, WOMEN), THERAPEUTIC REGIMEN, ACTIVITY THERAPY, PSYCHODRAMA
- SYSTEMATIC CLASSIFICATION
   OF MENTAL DISORDERS

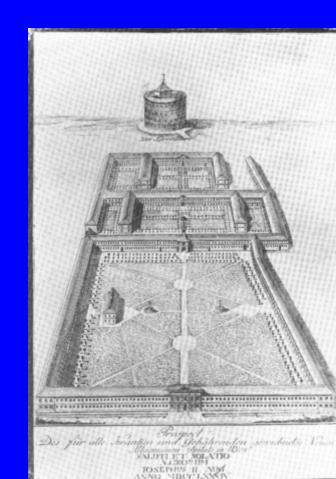


### Ph. PINEL: "HE RELEASED THE MENTALLY ILL FROM THEIR CHAINS"



## MEDICINE AND PSYCHIATRY IN CENTRAL EUROPE AT THE TURN OF THE 19th CENTURY

- Cellular medicine of Virchow (Rudolf V., 1821–1902) –
- "Omnis cellula e cellula"
- Isolation of the mentally ill institutional psychiatry
- Therapeutic scepticism physical exercise, relaxation, hydrotherapy, electrotherapy
- Medicines opium, camphor, turpentine ...



### VIENNESE PSYCHIATRY THE 19th CEN

loniz

cal "anatomy 1804 -1878), J



nert (1833–1892) – o ncept of mental illnes er von Jauregg (1857–1940) malariotherapy of progressive paralysis (syphilis) (Nobel Prize in 1927)

 Egas Moniz (1874-1955) – brain surgery leucotomy (Nobel Prize 1949)



## MODERN PSYCHIATRY 19th/20th century



Abb. 12. Kraepelin (5) auf der Wanderversammlung der Südwestdeutschen Psychiater in Baden-Baden, u. a. mit Alzheimer (3), Bethe (1), Gaupp (2), Nissl (4) (ca. 1910)

### **E**

## CLASSIFICATION OF MENTAL DISEASES

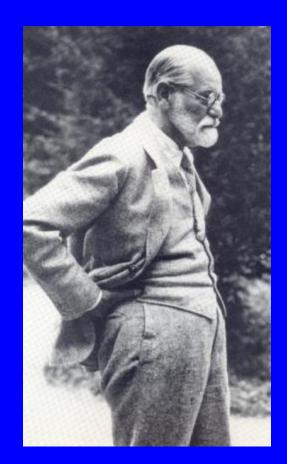
- 1861 W. Griesinger Einheitspsychose
- 1851 J. Falret folie circulaire
- 1891 A. Pick dementia praecox
- 1893 E. Kraepelin textbooks
- 1911 E. Bleuler schizophrenia
- 1912 K. Bonhoeffer acute exogenous reaction types – depressed level of consciousness, altered consciousness, mental deterioration



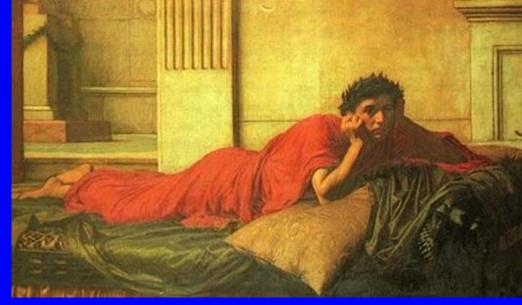
## The first half of the 20th century EUROPE



- Building of institutional psychiatry - psychoses
- Organic theory of mental disorders
- 1900 S. Freud Analysis of Dreams



## **BIOLOGICAL TREATMENT**

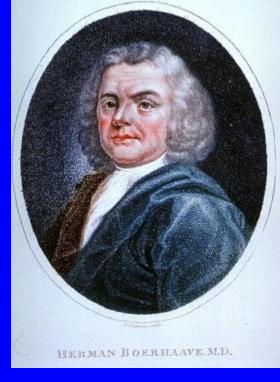




- Cruel shock-based method
- Metasyncrisis under the Roman Emperor Nero
- 17th century iatrochemical orientation – J.B. van Helmont fermentation processes, oxygen supply

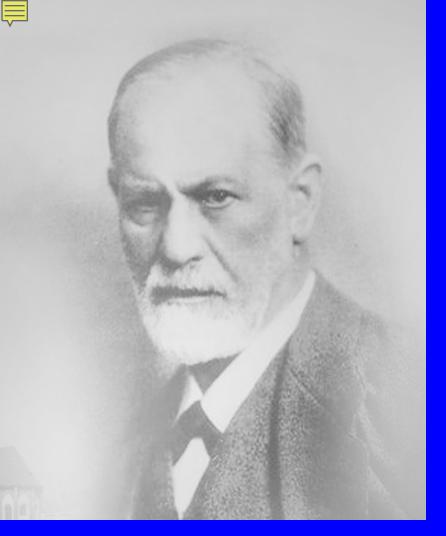
TREATMENT OF MENTAL DISORDERS BY FORCED SUBMERGING OF PATIENTS UNDER WATER

- 18th century Herman Boerhaave – benedictio maris
- Benjamin Rush (19th century) ducking
- Johan Christian Reil (19th century) unschädliche Tortur



## HERAPY CRNTIRY

- Ladislaus von cardiazole-ind
- Manfred Sack
- Ugo Cerletti a Electroconvulsive merapy
- Repetitive transcranial magnetic brain stimulation (George 1999)



## **SIGMUND FREUD** 1856 - 1939

- THEORY OF THE UNCONSCIOUS
- METHOD OF FREE ASSOCIATION
- PSYCHOSEXUAL DEVELOPMENT
- TRANFERENCE, COUNTER-TRANSFERENCE

### ■ T.G. MASARYK The Making • of a State S

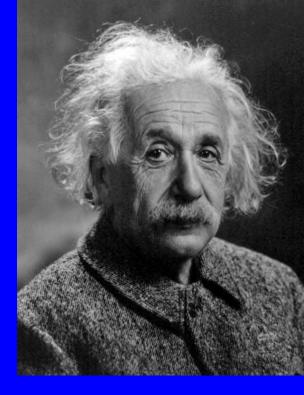
**Praha** 1936

...A German and, instructed and spoilt by the Russians, we alike analyze and dig the soul to uncover where and what mysterious and sick there is to be found. The English and the American is increasingly naive; they are interested in a riddle that is more mechanical. But they can also get thoroughly infected by modern theories, problems and superproblems and possibly also the ridiculous psychology of Freud ...



### ALBERT EINSTEIN April 21, 1936

"...Until recently I could only apprehend the speculative power of your train of thought without being in a position to form a definite opinion about the amount of truth it contains.



Not long ago, I had the opportunity of hearing about a few cases which in my judgement exclude any other interpretation than that provided by the theory of repression."

### **Fascism and WW II** to remove "inferiors from the society"

- 1933 Law for the prevention of Progeny with Hereditary Diseases – sterilisation of 400 000 people
- 1939 Euthanasia, in paediatric departments, 10 000 children were murdered
- 1939 1940 Within the T4 action, 70,000 psychiatric patients were killed in Germany; until 1945, a total of 180,000
- Flight of many Jewish psychiatrists from continental Europe (S. Freud)





### "AKTION T4" – dr. Karl Brandt

... by murdering 70 273 inmates, for 10 years the German government will save 33,731,040 eggs and 3,710,414 German marks and 40 pfennigs ... savings for vegetables and other food supplies have been also calculated...

Jaroszewski, 1993





## Second Half of the 20th Century

 50s - psychoanalysis 1952 Delay a Deniker – chlorpromazine



- 60s social approaches, community psychiatry
- 70s epidemiological research
- 80s new classification systems: DSM III, ICD 10, biological psychiatry
- 90s evidence-based medicine, costeffectiveness, Global Burden of Disease
- **3rd PSYCHIATRIC REVOLUTION**



## Nobel Prize in Medicine in 2000

**ARVID** CARLSSON – dopamine and psychomotor activity **PAUL GREENGAARD** – mechanism of action of dopamine and other neurotransmitters **ERIC KANDEL** – molecular mechanisms of affecting the activity of synapses





## **ONE-YEAR PREVALENCE OF DEPRESSIVE DISORDERS**

	<b>1991-2</b>	2001-2	<b>P</b> <
Number	42 862	43 093	
Total	3.33	7.06	0.001
Men	2.74	4.88	0.001
Women	3.88	9.06	0.001
18 – 29	5.99	9.98	0.001
30 – 44	3.86	7.32	0.001
45 +	1.32	5.54	0.001

Compton et al., 2006



### **Disability Adjusted Life Years** THE GLOBAL BURDEN OF DISEASE

	1990	2030
1	<b>Respiratory infections</b>	Unipolar depression
2	Intestinal infections	CHD
3	Perinatal mortality	Traffic accidents
4	Unipolar depression	Cerebrovascular
5	CHD	<b>Respiratory infections</b>
6	Cerebrovascular	Hearing losses
7	Tuberculosis	<b>Congenital defects</b>
8	Measles	HIV infection
9	Traffic accidents	Diabetes
10	Congenital defects	perinatal infections

Murray a Lopez, 1997, 2004



### **NEUES HAUS 1840 - 1844**

### **ALTES HAUS 1822**

K.K. IRREN ANSTALT.

Lechleit

St Claffamming a

1790



R. Asi

Corner

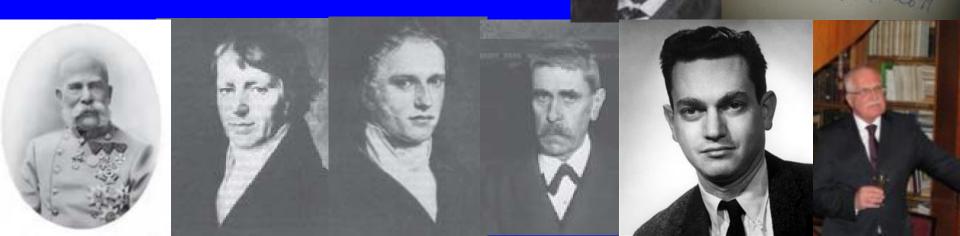
Psychiatric Clinic of the General Teaching Hospital 2012





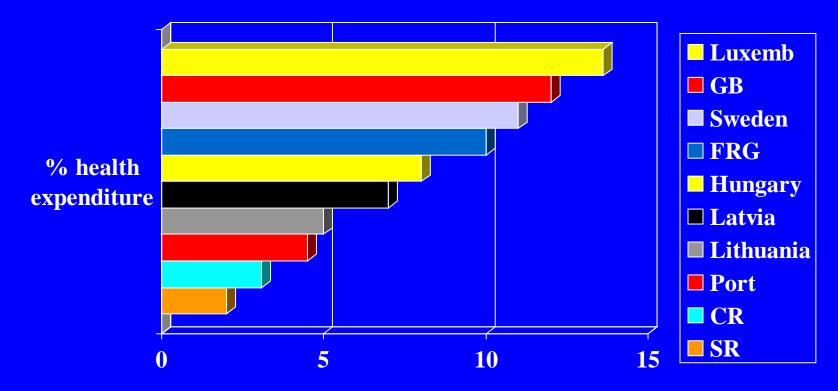
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Achievement of just funding extended to psychiatric care in keeping with the European standards and reflecting its medical, social as well as economic importance



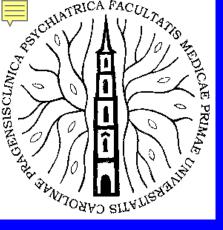
Green Paper, EC 2005



### SATISFACTION WITH TREATMENT EDEN (CAT 0 – 10)

Town	Day Care	Hospitalisation
Dresden	7.4	7.5
London	7.7	6.5
Wroclaw	7.8	8.2
Praha	8.2	8.3

Raboch et al., 2003





### PSYCHIATRY IN VF • 1790 MENTAL INSTITUTION – CUSTODIAE MENTE CAPTORUM

- 1822 ST. CATHERINE' CONVENT – "OLD HOUSE"
- 1844 NEW HOUSE,
- DOC. KAREL RIEDL

