

DEINSTITUTIONALIZATION IN EUROPE: TWO RECENT EXAMPLES FROM GERMANY AND HUNGARY

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SUMMARY

Deinstitutionalization has made possible the development of modern community psychiatric services, however radical decrease in the number of hospital beds may result in a reduction in the overall standard of psychiatric care and disruptions in service delivery. The authors present an example of deinstitutionalisation in Hungary, which led to serious difficulties in the provision of healthcare in the field of psychiatry, contrasted with a case from Germany serving as an example of an alternative solution.

Key words: deinstitutionalisation – psychiatry – Hungary - Germany

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INTRODUCTION

Deinstitutionalization in psychiatry has been a process of closing large psychiatric hospitals, mainly old institutional structures. This process has been very different in different parts of the world; thus in Italy, Act No. 180, an all-inclusive community oriented mental health law, was passed by the Italian Parliament in May 1978, and this led to the progressive closure of psychiatric hospitals (Palermo 1991). Massachusetts in the USA had a well planned process of deinstitutionalization, where “Clients were placed in supervised community residences or inpatient settings, not simply discharged” (Upshur et al. 1997). However serious problems emerged related to deinstitutionalization which were partly caused by the lack of planning for alternative facilities and services (Talbot 2004). In spite of the warning signs and publications even well developed countries could not avoid disasters caused by the closure of existing psychiatric hospitals without building up decentralized services: for example the mortality rate, including suicide rates of patients with schizophrenia, increased and the one year readmission rate of first time diagnosed patients with schizophrenia has not changed at all in Denmark (Jorgensen 1999).

The need for careful planning of adequate transfer from institutions to nursing homes, single-room occupancy buildings, board-and-care homes with sustainable community services has been analyzed (Koyanagi 2009).

Some new developments in deinstitutionalization build on the lessons of the past, such as the psychiatric reform in Hamburg, Germany. However, others do not, such as the closure of the National Institute of Psychiatry and Neurology in Budapest, Hungary. The authors describe these two examples.

In 2007, as part of the health reform programme in Hungary, and without any appropriate professional preparation, a government ruling resulted in a 25% reduction of acute psychiatric beds in the country and in the closure of the Hungarian National Institute of Psychiatry and Neurology (OPNI), which at that time was the country’s largest psychiatric treatment, teaching and research institute. In the same year the entire health care system, including the Semmelweis University in Budapest was forced to make dramatic cutbacks, reductions in capacity the like of which had never been seen before, and deep cuts in financing. Despite all this, the University still proved capable of helping in preserving significant values of the OPNI.

Abbreviations:

OPNI: Hungarian National Institute of Psychiatry and Neurology

OPK: National Centre for Psychiatry

DRG: Diagnosis Related Groups

In order to understand the scale of the damage caused by the abovementioned health policy decisions we describe the short history of OPNI (Gazdag et al. 2007). After lengthy preparatory work and as a result of a deed of gift presented by Franz Josef I., the National Buda Asylum was inaugurated in Leopoldfeld in 1868. In 1898 the asylum was transformed into the Leopoldfeld State Mental Institution, and then in 1924 it once more changed its name and continued functioning as the Budapest Hungarian Royal Mental and Neurological Institute. The “Hárshegy” sanatorium department was added in 1931.

The OPNI functioned as the national institute responsible beyond patient care for training, research and professional organizational tasks. Five acute inpatient departments provided psychiatric healthcare provision for a population of 700,000. These five departments – as a consequence of the requirement to guarantee regional provision – encompassed the entire spectrum of treatment for psychiatric disorders, which also supported the teaching and training activities of the Semmelweis University, such as the training of residents in psychiatry, training of clinical psychologists and Ph.D. students and the teaching of graduate students. Annually, on average each department admitted 1200–1500 patients as inpatients, while the outpatient wards of these departments had several thousand patients in a year, and supported those psychiatric and neurological patients who were ostracized to the periphery of society. The institute had a prominent role in tackling such problems as depression and suicide, alcohol and drug addiction, dementia, brain injuries and their consequences, epilepsy and child psychiatry.

The OPNI was not only a large psychiatric hospital and mental health administrative and teaching centre, but the leading research setting, successfully integrating basic and clinical neurosciences (biochemistry, histology, neurology, neuropsychology, neurosurgery, psychiatry, neuroradiology). Many of the research projects were performed in the frame of wide international collaborations from Poland to North America and from Sweden to Italy. In the last 25 years, the co-workers of OPNI published some hundred scientific papers in premiere international journals on the field of mood disorders and suicide (Arató et al. 1988; Rihmer et al. 1990; Rihmer 2007), psychiatric epidemiology (Szádóczy et al. 1998), social psychiatry (Füredi et al. 1993), epilepsy and sleep research (Halász et al. 2004), stroke and vascular neurology (Nagy et al. 2006), neuropathology (Kovács et al. 2005), as well as on basic neurosciences (Adori et al. 2006) and molecular genetics (Gonda 2006).

The final decade in the life of the institute was characterized by a struggle for survival. Although the institute regained its liquidity with the installation of a computer network and introduction of modern controlling systems, it did not receive the governmental support to maintain the functions of the institute. This is

why it carried out significant developments from its own resources and tender funding between 2002 and 2007, and research, training and patient care were all developed bearing in mind the professional strengths and international and national reputation of the institute.

In the first phase of the health reform programme the institute lost 156 of its 860 beds.

In spring 2007, during the session of the Central Hungary Regional Health Council at which a decision was to be reached on further corrections to the number of hospital beds, and which was attended by the leaders and owners of health institutions, no decisions were reached on matters of real importance and immediately following the opening the chairman of the assembly – despite protests – wound up the proceedings, thereby passing over responsibility for the decision to the minister of health. During the session a proposal was circulated in unofficial form, which in the end itself represented the essence of the final public administrative resolution, and under the provisions of which the OPNI lost all its inpatient capacity, in other words, a start was made on the closure and liquidation of the OPNI. The leadership of the institute received no explanation for the decision at the time, nor has such an explanation been forthcoming since. Despite this – although this was never declared – it was clear to everybody that the closure of OPNI was not a professionally planned and supported process but a rather quick political decision, which had a long term negative effect on psychiatric care in Hungary.

The inpatient and outpatient capacities were transferred to various institutions who looked on this as compensation for their own cuts in bed numbers and human resources. In real terms, however, there was a significant decrease in bed numbers due to the fact that resources promised for the transition never arrived. Doctors from the hospital were scattered to around 30 other institutions, while several found work in other countries of the EU and in the United States.

The loss was particularly painful because of the breaking up of professional teams and for those patients who found themselves without psychiatric care. Furthermore, we have not found any description of deinstitutionalization describing the rapid closure of a complex research, teaching and treatment centre without – at least some – planning. The decision-makers were left unmoved even by the protests of the profession in Hungary and abroad, and although at face-to-face meetings with various leading government and opposition party politicians far-reaching promises of support for the hospital were made, these too proved insufficient.

Part of one of the closed departments of OPNI was transferred to the Semmelweis University Kútvolgyi Clinical Block, where by merging with the department already functioning there the Clinical and Research Mental Hygiene Department was formed. Some other departments continue their activities in the Municipality’s Nyírő Gyula Hospital. Although not directly

related to the topic we also have to mention the National Stroke Centre, which was part of OPNI. The closure of this Centre left almost half of the city without adequate treatment for acute stroke patients.

The closure of the OPNI raised in the minds of the leadership of Semmelweis University the idea that, by transplanting organizational units of the institute within the university's own frameworks, it would be possible to create the opportunity to continue those professional activities of great significance and value that the health portfolio was intent on bringing to an end with the stroke of a pen. In this case, thought was followed by deed, as a result of which through the operation of numerous departments and laboratories it is possible to continue treatment and research activities, while museum artefacts of OPNI have been preserved by the university.

By attaching the Molecular Neurological Department and Laboratory to the Department of Neurology the opportunity has been given to continue projects which had been started earlier. Since the area in the new section was smaller than that previously available, unfortunately there was no possibility of continuing certain activities, including the operation of the isotope laboratory. However, all the former diagnostic and research activities could be continued in the new workplace, and over the past few months joint research projects have been launched with several university departments. At the end of 2008 the Senate of the university established the Molecular Neurological Clinical and Research Centre, which organized the disciplines related to rare diseases into a virtual network.

The Hungarian Reference Centre for Human Prion Disease received a place in the Department of Forensic and Insurance Medicine of Semmelweis University.

The closure of the OPNI resulted in the relocation of staff from the Department of Neuropathology to various places; the professor heading the department received an appointment at the university in Vienna. Eighteen months after the institute was shut down this department was transferred to the Department of Forensic and Insurance Medicine of Semmelweis University, along with the research and education archives and a significant proportion of the instruments, where it has been possible to continue, albeit at a reduced capacity, the high level professional activities of past decades.

The Department of Clinical Psychology was structurally integrated with Semmelweis University already from 1 January 2002, as the country's only independent Department of Clinical Psychology, which continued to operate in the OPNI as an external university department. With the closure of the OPNI the department moved to the Semmelweis University's Tömő Street building currently housing the Department of Ophthalmology.

In 2007, the Laboratory for Neurochemistry and Neuropsychopharmacology found itself in an extremely

difficult position once the decision to close the OPNI had been taken. On the one hand the staff, PhD and Scientific Students' Association students, along with all the other members of the institute, found themselves facing an uncertain future, and on the other hand, contracts signed with the European Research Council were endangered. In this critical situation, several professors of Semmelweis University offered their help in potentially relocating the laboratory to their departments. The leadership of the university assessed the various options and finally, after negotiations with representatives of the ministry, the laboratory was moved to the Semmelweis University. Work in the new laboratory started up in the same year, and by May of the following year it had largely succeeded in making up for the backlog, while the university took over the place of the OPNI in the European Union consortium.

The Vascular Neurological Department, the Cellular Biology Laboratory and the veterinary theatre were all transferred to the Cardiology Centre of Semmelweis University, while the clinical neurology and epilepsy departments moved in part to the National Scientific Institute of Neurosurgery, and partly to the National Health Centre (which is the main hospital of the government).

The fate of the OPNI Library proved equally difficult to resolve. In autumn of 2007, the Department of Psychiatry and Psychotherapy formally announced that it would be willing to take over and care for the library. After fruitful negotiations in August 2008, a decision was reached that the department would receive the OPNI Library. The transfer was made – with the assistance of the university – in September of the same year, and the entire stock was deposited in the building of the clinical department and in the Diószeghy Street repository of the university. At the time of the submission of this manuscript a large proportion of the books is still in the repository and basically not accessible for researchers.

It would be difficult to list all the activities that staff of this world renowned institution were engaged in apart from patient care. The Hungarian National Institute of Psychiatry and Neurology acted as the professional centre for psychiatry in Hungary, and as such, the staff here were engaged in analysis of epidemiological data, the professional operation of treatment sites and also on drafting health policy for the psychiatry profession. Their departure left a huge gap in the system and the fact that these activities were abruptly stopped without any form of legal succession, has caused serious difficulties. The National Centre for Psychiatry (OPK) located on the Semmelweis University campus was established at the initiative of the ministry, to “remedy” this deficiency. The stated objective of founding OPK was to set up a new type of professional and methodological centre embracing the entire branch of medicine, which would be capable of ensuring the cohesion, organization and representation of the

specialist field at a national level. However this Centre has only six full time equivalent persons.

Sic transit gloria mundi, one could say, and after a long past thus also ended the story of Hungary's sole national psychiatric institute. Semmelweis University managed to save numerous of its professionally significant values as well as its internationally renowned research laboratories, but of course, there were also huge losses. As a consequence of the closure of OPNI the psychiatric care system of the entire country, and directly of Budapest and the Central region of Hungary was restructured. The capital, with a population (including the agglomeration) of three million, was forced to find new solutions.

To sum up, the following are the basically negative consequences of the closure of the OPNI:

- the closure of numerous departments and the relocation of many others to other institutions (Semmelweis University, two hospitals of the Municipality of Budapest, National Scientific Institute of Neurosurgery, State Health Centre);
- the dissolution of efficiently operating professional teams with significant achievements;
- the increased impetus, albeit indirectly in the migration of specialist doctors, thereby further degrading the healthcare indicators of Hungary;
- the “scattering to the winds” of the specialized healthcare staff possessing huge professional experience;
- the reduction in the standard and efficiency of psychiatric care due to the reduction in the number of hospital beds and in the number of psychiatric healthcare specialists, mainly medical doctors;

- the endangerment of the mental, and in some cases the physical health and wellbeing of numerous patients – and those living in their immediate environment – following the breaking off of patient treatment and the loss of control over continued treatment.

CONSEQUENCE OF THE CLOSURE AS REFLECTED IN THE FIGURES

Going on the basis of what has been written so far, it may appear to many that in the evaluation of the closure of the National Institute of Psychiatry and Neurology (OPNI) as an erroneous governmental decision the authors of this article are primarily driven by personal emotions. We believe, that data contained in the Table 1, Table 2 and Table 3 describe the situation rather objectively. However we would like to underline, that - while staff and beds from OPNI were also transferred to other institutions - we are examining the change in the quality of provision solely from the viewpoint of Semmelweis University.

In analysing the data we must start from the fact that psychiatry patient care cannot be considered an area of patient provision like, for example, the classical fields of internal medicine or surgery. In the latter cases the time – in days – required for hospitalization can be accurately determined and basically it comes to an end with the patient's release from hospital. The same cannot be said for psychiatric patients, where significant therapeutic work continues following hospital treatment, or between two or perhaps more hospital treatments. The closure of OPNI damaged or ruined those services that had been established to guarantee this standard.

Table 1. Change in number of psychiatric beds based on reports of the Ministry of Health

Report Nr.1618/04 by the Ministry of Health (EüM, ESzCsM) about psychiatric departments
Status as of 1st December, 2006.

Denomination	Active	Rehab	Chronic	Total
Number of beds*	4 031	4 239	1 003	9 273
In percent (%)	43.50%	45.70%	10.80%	100.00%
Number of beds for 100 thousands residents	40	42.1	10	92

* together with paediatric psychiatry + addictology +OPNI psychiatric internal and infectology beds

Report Nr.1618/04 by the Ministry of Health (EüM, ESzCsM) about psychiatric departments
Status as of 1st December, 2007. (*Processing of figures in 2008 has just started*)

Denomination	Active	Rehab	Chronic	Total
Number of beds**	3 052	3 899	1 320	8 271
In percent (%)	36.90%	47.10%	16.80%	100.00%
Number of beds for 100 thousands residents	30.3	38.7	13.1	82.2

** together with paediatric psychiatry (200) + addictology (800) beds

Number of beds before and after the reform (number of institutions giving figures was 118 in 2006, 103 in 2007). (In most of the cases one institution giving figures means not only a department but an integrated unit with active, rehab and ambulance units.) In the OPNI there were 848 beds of which 309 active, 539 rehab. From the active beds 175 were psychiatric (from which 15 paediatric) and from the 539 rehab beds 509 were psychiatric (from which also 15 paediatric).

Table 2. Data on adult psychiatry active in-patient provision (Source: OEP FIFO)

	2006 (full year before reform)		2008 (after reform)	
	OPNI	University Department of Psychiatry + Psychiatry Unit of Kútövölgyi	University Department of Psychiatry + Psychiatry Unit of Kútövölgyi	
Active number of beds	160	93+26=119	107+84=191	
Cases	3 395	2 878	4 155	
No. of nursing days	56 255	42 020	63 788	
No. of doctors	24	32+6=38	24+13=37	
DRG	3 312	2 790	4 081	
No. of cases per doctor	141.45	75.73	112.29	
No. of nursing days per doctor	2343.95	1105.78	1724	
No. of nursing days per patient	26.56	14.60	15.35	
No. of cases per bed	21.21	24.18	21.75	
No. of doctors per bed	0.15	0.319	0.193	

Table 3. Active psychiatric treatment capacity

Active nursing by branch				
Branch		Total cases	Cumulative number of the scores of Diagnostic Related Grups	Actual days of treatment
2006				
18	Psychiatry	73 969	75 541.1	1 122 333
41	Child and youth psychiatry	3 022	4 525.8	37 378
2007				
18	Psychiatry	57 736	60 106.1	871 555
41	Child and youth psychiatry	2 847	4 182.4	28 460

Comparing the figures of the two years it is clearly seen that the decisions of the 2007 year's "reform" effected huge decline both in the numbers of patients and days of treatment

Healthcare indicators declined in every area of psychiatric care. In 2008, the first full year after the reform, psychiatry presents poorer results overall than in 2006, when OPNI was still functioning. A comparison of the data from the two years allows us to state that while the number of active beds declined, the number of patients receiving inpatient treatment increased, in other words the same number of patients had to be treated with fewer beds and smaller staff.

The workload of doctors increased significantly. In 2008 the average length of stay per patient was just 15.35 days, a considerable reduction as compared to 2006. The difference is even more conspicuous if we compare these figures with those of the Hamburg institution offering similar psychiatric care, where in the same year the average length of stay in the hospital was 21.23 days.

Virtually parallel with these developments, in a city 1000 km from Budapest with a similar population, a similarly large and diverse psychiatric institution also sought solutions. The psychiatric hospital in Ochsenzoll, Hamburg was not closed down but it did undergo restructuring. In this article, we present two contrasting examples of crisis management in Europe.

ANOTHER EXAMPLE – RESTRUCTURING OF A LARGE PSYCHIATRIC FACILITY: ASKLEPIOS KLINIK NORD – OCHSENZOLL

This psychiatric facility encompasses 650 inpatients, 129 day clinic patients and a forensic clinic with 236

inpatients. The clinic serves a Hamburg population of more than 750,000 people. Until 2006, this clinic had the following structure:

- Department of Psychiatry (covering the centre of Hamburg);
- Department of Psychiatry (covering the north of Hamburg);
- Department of Psychiatry (covering the west of Hamburg);
- Department of Geriatric Psychiatry;
- Department of Addiction;
- Department of Forensic Psychiatry.

The already specialized departments (4, 5 and 6) had a good reputation and were treating their patients with modern psychopharmacological and psychotherapeutic methods. However, the non-specialized departments (1, 2 and 3) were treating their patients on the basis of concepts of social psychiatry. Social psychiatry was a relatively modern approach in the 70s and 80s, taking an individual approach to patients with the focus on families, social support and out of clinic resources. Traditionally patients with different diseases were treated in the same setting and on the same ward. Therefore, specialized psychopharmacological and psychotherapeutic treatment paths were not effectively implemented in departments 1, 2 and 3.

Research in psychopharmacology and psychotherapy has resulted in a continuous growth in specialized knowledge on the treatment of psychiatric

diseases in the past 30 years. Therefore, no single ward or single psychiatrist or psychotherapist can be an expert in the treatment of all psychiatric patients. Specialized units and specialized therapists are needed to offer state-of-the-art therapy. Consequently, specialized treatment units in which patients share the same symptoms (e.g. depression, psychosis, personality disorder) are more and more common in psychiatric hospitals. Only then can psychiatrists, psychologists and nursing staff implement specialized treatment care and receive appropriate continuous medical education.

Revealingly, we already had this positive experience with our three existing specialized departments for geriatric psychiatry, addiction and forensic psychiatry. Hence we decided to create new, specialized departments for distinct diagnostic groups. More precisely, we created three new departments:

1. Department for Affective Disorders:
 - Ward 1: Depression;
 - Ward 2: Depression and bipolar disorder;
 - Ward 3: Anxiety disorders.
 2. Department for Personality Disorder and Trauma:
 - Ward 1: Emergency ward for patients with personality disorders;
 - Ward 2: Traumatized women;
 - Ward 3: Borderline personality disorder;
 - Ward 4: Young patients with personality disorders.
 3. Department for Acute Psychiatry and Psychosis:
 - Ward 1: Emergency ward;
 - Ward 2: Closed psychiatric ward;
 - Ward 3: Closed psychiatric ward;
 - Ward 4: Open ward for chronically ill schizophrenic patients;
 - Ward 5: Open ward for schizophrenic patients;
 - Ward 6: Open ward for young psychotic patients.
- And the already existing specialized departments
4. Department of Geriatric Psychiatry;
 5. Department of Addiction;
 6. Department of Forensic Psychiatry.

We recruited medical and psychological staff, who were already specialized and were able to implement modern psychopharmacological and psychotherapeutic treatment plans. In particular, we established the new position of a senior psychologist for each department to support psychotherapeutic programmes. We put the focus on the continuous psychotherapeutic education of residents and psychologists since modern psychotherapy offers numerous treatment options for psychiatric patients which were not employed in the past.

In summary, the reconstruction of this psychiatric facility offers the following advantages:

- State-of-the-art treatment for psychiatric patients;
- Increased specialized psychotherapeutic treatment concepts;
- A more attractive environment and acceptance of the clinic by patients;

- A more attractive environment and acceptance of the clinic by residents and psychotherapists as a working place;
- Extension of these specialized treatment concepts into the outpatient clinic and cooperation with specialized psychiatrists and psychotherapists.

For the last 30 years there has been a gradual process of deconstruction at old, large psychiatric facilities with often more than 500 beds in favour of opening smaller psychiatric departments (100-120 beds) at somatic hospitals. However with the development of specialized treatment modalities the need for large psychiatric facilities with more than 100-120 beds has grown since only in this case is there an opportunity to create different specialized and sub specialized wards.

CONCLUSIONS

We have described two European examples contrasted with each other: Restructuring in Germany and hospital closure without any development of outpatient care and community psychiatry in Hungary. What is the responsibility of health policy in these decisions? What options were open to the profession and professional teams? The examination of the viability of large healthcare systems and their restructuring are increasingly urgent problems everywhere in the world. But how this happens is by no means irrelevant. In Hamburg, the profession and management received the needed political and financial support to react to the challenges in such a way that the fundamental interests of patients were not injured, and professional teams did not disappear either. In Hungary, without the rapid and effective assistance of the country's largest medical university the result would have been even more tragic than the eventual, tragic in itself, conclusion. And what impact occurred can be seen by comparing 2006, the last full year before the reforms, while 2007 which was the year of the closures. It is evident that there was a dramatic reduction in the number of adult patients treated and the number of days of treatment (Table 3).

In the case of Hungary we have demonstrated a rather rapid and, for all concerned, painful process. From the viewpoint of Semmelweis University in Budapest, and despite the fact that its existence was not at stake, still there are many lessons to be learned from the events of the 1-1.5 years outlined above. Should we continue with layoffs, or develop using every means at our disposal, building a future? Obviously the latter is the only sensible option that an institution with a vision of the future can choose.

And what lessons can we learn from these events? Who came out winners? Who were the losers? We can state categorically that there were no winners- at least genuine winners. But perhaps in this case this was not the point. Maybe as a result of many years of efforts we will be able to finally say that there were no significant

aggrieved parties. Who lost? First and foremost Hungarian psychiatric patients and all involved in the treatment of psychiatric patients. The closure of OPNI is a bad example of deinstitutionalization: there are far fewer places, no more or even less outpatient care which resulted in overcrowded institutions often with extremely short hospital stays. So what really is the moral of this? In all probability, that however good and beneficial a health policy objective is, no health politician should undertake it without involving the profession, or without examining other, already existing, even foreign examples.

And what can the university learn? Where can a preference for daily operation lead when we are sacrificing our future? Is it right to withdraw funding from every area if an institution, in the current instance the Semmelweis University, has a realistic strategy and vision of the future? The answer is clear: no, even if with gritted teeth, still it is essential to create the foundations for stable management capable of guaranteeing professional operation though necessary internal restructuring, but under no circumstances may we consume those resources earmarked for the future. In the interests of a conceptualized and approved vision of the future the very worst response is to withdraw and cancel development resources.

Parallel with this, in Germany a similarly sized institute to OPNI, also struggling with non-professional decisions on health reform, had a lifeline thrown to the internationally acknowledged teams including research teams. We know by now the outcome. These examples can serve as a lesson both for every expert and for every healthcare policy decision-maker, as it illustrates that a problem can be resolved in different ways.

REFERENCES

1. Adori C, Andó RD, Kovács GG & Bagdy G: Damage of serotonergic axons and immunolocalization of Hsp27, Hsp72, and Hsp90 molecular chaperones after a single dose of MDMA administration in Dark Agouti rat: temporal, spatial, and cellular patterns. *J Comp Neurol*, 2006; 497:251-269.
2. Arató M, Demeter E, Rihmer Z & Somogyi E: Retrospective psychiatric assessment of 200 suicides in Budapest. *Acta Psychiatr Scand*, 1988; 77:454-456.
3. Füredi J, Barcy M, Kapusi G & Novák J: Family therapy in a transitory society. *Psychiatry Interpersonal and Biological Processes*. 1993; 56:328-336.
4. Gazdag G, Baran B, Kárpáti M & Nagy Z: The history of Lipótmező, the site of the first convulsive therapy, *J ECT*. 2007; 23:221-223.
5. Gonda X, Rihmer Z, Zsombok T, Bagdy G, Akiskal KK & Akiskal HS: The 5HTTLPR polymorphism of the serotonin transporter gene is associated with affective temperaments as measured by TEMPS-A. *J Affect Disord*. 2006; 91:125-131.
6. Halász P, Terzano M, Parrino L & Bódizs R: The nature of arousal in sleep. *J Sleep Res*, 2004; 13:1-23.
7. Kaiser Commission on Uninsured and the Medicaid: Learning From History: Deinstitutionalization of People with Mental Illness As Precursor to Long-Term Care Reform Prepared by Chris Koyanagi, - The Henry J Kaiser Family Foundation, Washington DC, 2007 www.kff.org/medicaid/upload/7684.pdf, accessed: 11.05.2009.
8. Kovács G, Höftberger R, Majtényi K, Horváth R, Barsi P, Komoly S, Lassmann H, Budka H & Jakab G: Neuropathology of white matter disease in Leber's hereditary optic neuropathy. *Brain*, 2005; 128:35-41.
9. Nagy Z, Javor A, Harcos P & Bodo M: Hungarian stroke program: 1988-2006. *Internat J Stroke Res*, 2006; 1:240-241.
10. Palermo GB: The 1978 Italian Mental Health Law - a personal evaluation: a review *Journal of the Royal Society of Medicine*, 1991; 84:99-102.
11. Povl Munk-Jørgensen: Has deinstitutionalization gone too far? *Eur Arch Psychiatry Clin Neurosci*, 1999; 249:136-143.
12. Rihmer Z, Barsi J, Vég K & Katona CLE: Suicide rates in Hungary correlate negatively with reported rates of depression. *J Affect Disord*, 1990; 20:87-91.
13. Rihmer Z: Suicide risk in mood disorders. *Curr Opin Psychiatry*, 2007; 20:17-22.
14. Szádóczy E, Papp Zs, Vitrai J, Rihmer Z & Füredi J: The prevalence of major depressive and bipolar disorders in Hungary. Results from a national epidemiologic survey. *J Affect Disord*, 1998; 50:153-162.
15. Talbott JA: Deinstitutionalization: Avoiding the disasters of the past. *Psychiatric Services*, 2004; 10:1112-1115.
16. Upshur CC, Benson PR, Clemens E, Fisher WH, Leff HS & Schutt R: Closing State Mental Hospitals in Massachusetts: Policy, Process, and Impact. *International Journal of Law and Psychiatry*, 1997; 20:199-217.

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