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Involuntary Hospitalizations of Patients with Mental Disorders in Vrapče Psychiatric Hospital: Five Years of Implementation of the First Croatian Law on Protection of Persons with Mental Disorders

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Aim. To analyze data on the practice of involuntary hospitalizations of patients with mental disorders in Vrapče Psychiatric Hospital from January 1, 1998, when the Law on Protection of Persons with Mental Disorders came into power, to December 31, 2002; with particular reference to the changes and supplements to the Law on December 1999.

Method. The data on patient's sex, age, and diagnosis were collected from the medical records. Patients were diagnosed according to ICD-10 criteria. When a patient had two or more diagnoses, he or she was placed in category of the primary diagnosis. Results were statistically analyzed by descriptive statistics and chi-square test. Statistical significance was set to $p < 0.01$.

Results. The rate of involuntarily hospitalized patients increased by significantly from 1998 to 1999 (from 30.8% to 39.6%; $p < 0.01$, chi square test). This rate decreased to 5.6% in 2000 ($p < 0.01$), and continued to decrease in 2002 (3.5%). There was no difference between involuntarily hospitalized patients regarding sex in 1998 ($p = 0.302$) and 1999 ($p = 0.136$). Men were significantly more often involuntarily hospitalized than women in 2000, 2001, and 2002 ($p < 0.01$). Schizophrenia and other psychotic disorders were the most common diagnoses among involuntarily hospitalized patients in each of the observed years.

Conclusion. Changes and supplements to the Law on Protection of Persons with Mental Disorders from December 1999, which abolished the necessity for a written consent for hospitalization and the necessity for prescribed procedure of hospitalized persons who were mentally incompetent to consent for hospitalization, led to significant decrease in the number of involuntary hospitalizations.

Key words: *hospitals, psychiatric; legislation and jurisprudence; mental disorders; personal autonomy*

Mental health legislation makes legal provisions for the protection of the basic human and civil rights of people with mental disorders. The legislation includes provisions for dealing with restraint and protection of individual patients, regulations for compulsory admissions, discharge procedures, appeals, and protection of property. Currently, the focus is on ensuring consistency with international human rights obligations. It covers the right to treatment, parity in services, entitlement, housing, social support and other matters. In the world, 75.3% countries have laws in the field of mental health. More than half of the existing legislation has been enacted since 1990 (1). Whereas some countries have well-defined mental health acts with provisions for human rights admission and discharge rules and treatment facilities, others have laws related to particular aspects of mental health, such as psychiatric services, admissions and discharge rules, involuntary treatment, or laws related to offenders with mental disorders. Some countries, such as Cuba, Hungary, and Spain, include mental health legislation within their laws on general health. In Italy, the application of the national Law on Mental Health is defined by regional laws and decided at local level (1).

In Croatia, the problem of involuntary hospitalization of mentally ill patients is regulated by the first Croatian Law on Protection of Persons with Mental Disorders, from 1997, which came into force on January 1, 1998 (2). Before this, Croatia did not have such a law. Involuntary hospitalization was regulated by extrajudicial proceeding from 1934, and by the Laws on Health Care and Health Insurance from 1980 and 1993, respectively (3). Even before these legal regulations, there had been very clear signs of regulation of not only the problem of involuntary hospitalization

but rights of mental patients. The Statute of the Vrapče Psychiatric Hospital (then called the "Institution for Mentally Ill, Stenjevec") was a very modern, advanced, and detailed law, passed in 1880 (3).

The Croatian Law on Protection of Persons with Mental Disorders has been in effect for five years. Involuntary hospitalization of mental patients is regulated by the section 22 of the Law. The paragraph states that a "person with more severe mental disturbance who, as a result of his or her mental illness, brings his or her life, health or safety, or other people's lives, health or safety into jeopardy, can be placed in a psychiatric hospital without consent, according to the procedure for involuntary hospitalization, regulated by this Law". In the following text of the Law, in the procedure for reporting involuntary hospitalization to the authorized court it is stated that the court must 1) visit an involuntarily admitted person within 12 hours; 2) name an expert psychiatrist who is required to give an expert opinion regarding the necessity for involuntary hospitalization; and 3) make the decision regarding involuntary hospitalization within eight days (4). In another part of the Law, involuntary hospitalization of mental patients who committed a criminal offence in the state of mental incompetence is regulated. In the original text of the Law, written consent was required from any person admitted in a psychiatric hospital (2). In the case where a written consent was not obtained or in cases where a person was not in a condition to give a written consent, the court had to be informed of such hospitalization. After being informed, the court conducted the necessary legal procedure, in the same manner as for a patient who was involuntarily hospitalized. This led to a high number of hospitalized patients who were submitted to prescribed procedure (5). Changes and supplements of the Law, made in December 1999, abolished the necessity for a written consent, and the necessity for prescribed procedure of hospitalized persons who were mentally incompetent to consent (6). Furthermore, the period in which the hospital was obliged to inform the court of involuntarily admitted person was prolonged from 12 to 72 hours.

Several factors seem to be related to involuntary hospitalization: psychosis, social, and cultural influences (e.g., "not owning a home", "having different ethnicity"), masculine gender, and being single and young (7-10). The strong association of involuntary legal status at first admission with involuntary status at second admission and with the number of involuntary admissions over time suggests that the involuntary first admission may be an important factor in assessing whether patients are likely to be readmitted involuntarily (11). The increased number of malpractice suits, especially in the event of post-discharge suicide, has had an impact on the practice of medicine (12,13). It can be speculated that negative experiences in psychiatric treatment contribute to a patient's decision to turn to alternative practitioners (ie, herbalists, magic healers, or bioenergists), especially in the countries where traditional beliefs concerning the cause of mental illness have a strong influence on the therapeutic process (14,15).

The aim of this study was to analyze data on the practice of involuntary hospitalizations of patients with mental disorders in Vrapče Psychiatric Hospital in the period from January 1, 1998, to December 31, 2002. Our particular interest was to compare rates of involuntary hospitalizations before and after changes and supplements to the Law on Protection of Persons with Mental Disorders, implemented since December 1999. We hypothesized that the rate of involuntary hospitalizations fell significantly after changes and supplements to the Law on Protection of Persons with Mental Disorders, in December 1999.

Subjects and Methods

Subjects

A total of 32,073 patients were admitted to the Vrapče Psychiatric Hospital in the period from January 1, 1998, until December 31, 2002. Patients with more severe mental disturbance who, as a result of his or her mental illness, brought his or her life, health or safety, or other people's lives, health or safety into jeopardy were involuntarily hospitalized under section 22, subsection 1. Patients, who were not competent to consent for hospitalization due to mental condition and did not have a care-giver, were involuntarily hospitalized under section 21, subsection 3. According to the Law on Protection of Persons with mental Disorders, which came into force on January 1, 1998, the patients were involuntarily hospitalized under section 21, subsection 3, and section 22, subsection 1, of the Law. Changes and supplements to the Law, in December 1999, abolished the necessity for written consent for hospitalization, and the necessity for prescribed procedure of hospitalized persons who were mentally incompetent to consent for hospitalization.

Data Collection and Analysis

The data were collected from the medical records of the patients, and included patient's sex, age, and diagnosis. Patients were diagnosed according to the ICD-10 criteria (16). The ICD-10 group F00-F07 consisted of delirium, dementia or other cognitive disturbances; F10 diagnosis included alcoholism; group F11-F19 included substance dependence; F20–F29 diagnoses comprised schizophrenia and other psychotic disorders; group F30-F34 consisted of mood disorders; group F40-F48 consisted of anxiety disorders; F50 diagnosis included eating disorders; group F60-F69 included personality disorders; group F70-F72 included mental retardation; group G40, G47 included episodic and paroxysmal disorders; group X61, X70 consisted of suicide attempts. When a patient had two or more diagnoses, he or she was placed in category of the primary diagnosis. The results were statistically analyzed using methods of descriptive statistics and chi-square test. Statistical analysis was performed using the Statistica software, Version 6.0 (17). Statistical significance was set to $p < 0.01$.

Results

The rate of involuntarily hospitalized patients rose significantly from 1998 to 1999 (from 30.8% to 39.6%), but then significantly decreased in 2000 to 5.6% (Fig. 1). There was no difference in the rates of involuntarily hospitalized patients between 2000 and 2001 (5.6% vs 5.0%, $p = 1.766$), but there was another significant decrease in the rate of involuntarily hospitalized patients in 2002 (5.0% vs 3.5%) (Fig. 1). Compared with 1998, the rates of involuntarily hospitalized patients in 1999 increased significantly in the diagnostic categories of delirium, dementia, or other cognitive disturbances, alcoholism, and schizophrenia and other psychotic disorders (Table 1). In the same period, there was no difference in involuntary hospitalization of patients with mood disorders

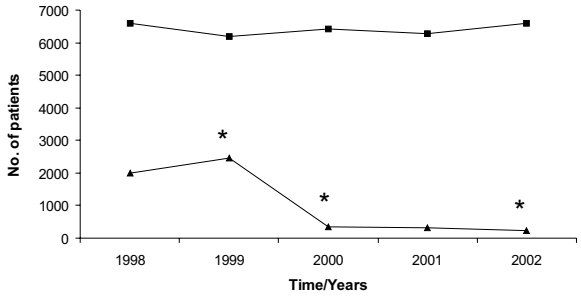

Figure 1. Involuntary hospitalizations (triangles) in relation to total hospitalization (squares) at the Vrapče Psychiatric Hospital during 1998-2002. Asterisk denotes ($p < 0.01$ vs previous calendar year; chi-square test).

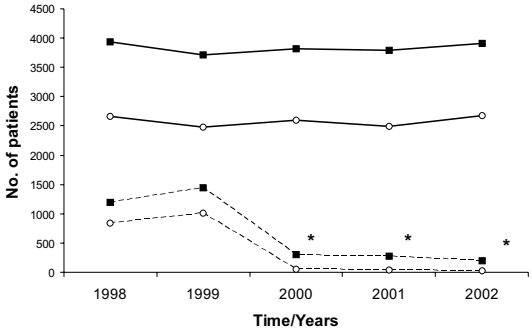

Figure 2. Analysis of involuntary hospitalizations regarding sex of patients admitted at the Vrapče Psychiatric Hospital during 1998-2002. Squares – men; circles – women; full line – total hospitalizations; dashed line – involuntary hospitalizations. Asterisk denotes ($p < 0.01$ vs previous calendar year; chi-square test).

($p = 0.01$). In 2000, the rates of involuntarily hospitalized patients decreased significantly in diagnostic categories of delirium, dementia or other cognitive disturbances, alcoholism, schizophrenia and other psychotic disorders and mood disorders ($p < 0.01$). Between 2000 and 2001, the rates of involuntarily hospitalized patients fell significantly in the group of alcoholics ($p < 0.01$). There was no difference in the rates of delirium, dementia or other cognitive disturbances ($p = 0.607$), schizophrenia and other psychotic disorders ($p = 0.567$), and mood disorders ($p = 0.355$). Between 2001 and 2002, the rates of involuntarily hospitalized patients fell significantly in the group of schizophrenia and other psychotic disorders ($p < 0.01$). There was no difference in the rates of delirium, dementia or other cognitive disturbances ($p = 0.851$), alcoholism ($p = 0.711$), and mood disorders ($p = 0.964$) (Table 1). There was no difference between involuntarily hospitalized patients regarding sex in 1998 (30.3% vs 31.5%, $p = 0.302$) and 1999 (38.9% vs 40.8%, $p = 0.136$). Men were significantly more often involuntarily hospitalized in 2000 (7.9% vs 2.2%), 2001 (7.2% vs 1.8%), and 2002 (5.2% vs 1.0%) (Fig. 2). Schizophrenia and other psychotic disorders were most common diagnoses among involuntarily hospitalized patients in each of the observed years (42.2% in 1998; 43.0% in 1999; 77.4% in 2000; 88.6% in 2001; 86.8% in 2002). The second largest group of involuntarily hospitalized patients in 1998 and 1999 was the group of patients suffering from delirium, dementia or other cognitive disturbances (24.2% in 1998; 23.1% in 1999). The second largest group of involuntarily hospitalized patients in 2000, 2001, and 2002 was the group of patients with diagnosed alcoholism (F10) (10.1% in 2000, 4.1% in 2001, and 4.8% in 2002, respectively) (Table 1).

Discussion

Our results showed significant increase in the rate of involuntary hospitalizations from 1998 to 1999, the first two years of implementation of the Law

Table 1. Diagnostic categories of patients admitted involuntarily at the Vrapče Psychiatric Hospital during 1998-2002

		No. (%) of patients per year				
Diagnosis (ICD-10)	hospitalization	1998	1999	2000	2001	2002
Delirium, dementia, or other cognitive disturbances (F00-F07)	involuntary	491 (62.1)	566 (75.4)*	9 (1.1)*	2 (0.2)	5 (0.6)
	total	791 (100.0)	751 (100.0)	804 (100.0)	802 (100.0)	898 (100.0)
Alcoholism (F10)	involuntary	452 (29.1)	545 (39.0)*	36 (2.3)*	13 (0.9)*	11 (0.7)
	total	1548 (100.0)	1398 (100.0)	1549 (100.0)	1486 (100.0)	1589 (100.0)
Substance dependence (F11-F19)	involuntary	41 (14.5)	37 (13.8)	13 (4.7)	8 (3.0)	1 (0.4)
	total	282 (100.0)	269 (100.0)	274 (100.0)	265 (100.0)	274 (100.0)
Schizophrenia and other psychotic disorders (F20-F29)	involuntary	857 (40.5)	1055 (51.7)*	277 (13.4)*	278 (14.3)	200 (9.8)*
	total	2115 (100.0)	2040 (100.0)	2065 (100.0)	1945 (100.0)	2044 (100.0)
Mood disorder (F30-F34)	involuntary	55 (6.2)	73 (9.7)	10 (1.5)*	6 (0.8)	7 (1.0)
	total	890 (100.0)	752 (100.00)	658 (100.0)	716 (100.0)	734 (100.0)
Anxiety disorder (F40-F48)	involuntary	18 (3.2)	29 (5.2)	3 (0.4)	0	1 (0.2)
	total	570 (100.0)	554 (100.0)	674 (100.0)	677 (100.0)	664 (100.0)
Eating disorders (F50)	involuntary	0	2 (4.2)	0	0	0
	total	50 (100.0)	48 (100.0)	32 (100.0)	40 (100.0)	35 (100.0)
Personality disorder (F60-F69)	involuntary	10 (9.7)	11 (10.2)	2 (1.9)	1 (0.9)	2 (1.7)
	total	103 (100.0)	108 (100.0)	103 (100.0)	107 (100.0)	115 (100.0)
Mental retardation (F70-F72)	involuntary	45 (68.2)	75 (76.5)	3 (3.7)	6 (7.9)	2 (2.8)
	total	66 (100.0)	98 (100.0)	81 (100.0)	76 (100.0)	72 (100.0)
Episodic and paroxysmal disorders (G40, G47)	involuntary	9 (9.2)	10 (11.4)	0	0	0
	total	98 (100.0)	88 (100.0)	90 (100.0)	82 (100.0)	79 (100.0)
Suicide attempt (X61, X70)	involuntary	50 (60.2)	50 (59.5)	5 (5.5)	2 (2.4)	2 (2.5)
	total	83 (100.0)	84 (100.0)	91 (100.0)	85 (100.0)	81 (100.0)

*$p < 0.01$ vs previous calendar year; chi-square test.

on Protection of Persons with Mental Disorders. Also, compared with 1998, the rates of involuntarily hospitalized patients in 1999 increased significantly in all observed diagnostic categories except in the category of patients with mood disorders. High number of involuntary hospitalizations and even their increase in the second year of Law implementation can be explained by the time the psychiatrists needed to become acquainted with the Law. Also, a period of time was necessary for the specialists of other branches (other physicians, judges, lawyers, social workers) to get familiar with the Law and its implementation (18). From January 1998 until November 1999 the Law remained unchanged – patients were involuntarily hospitalized under section 21, subsection 3, and section 22, subsection 1, of the Law on Protection of Persons with Mental Disorders. However, since the beginning of the implementation, the Law provoked resistance from both the psychiatrists and judges (18-20). For this reason, but also because of many impractical solutions, changes and supplements to the Law were made in December 1999, and came into effect in January 2000. The changes and supplements to the Law on Protection of Persons with Mental Disorders abolished the necessity for a written consent, and the necessity for a prescribed procedure of hospitalized persons mentally incompetent to consent (section 21, subsection 3). Our study showed that this led to a significant decrease in the rate of involuntary hospitalizations, and also to a significant decrease in the rates of involuntarily hospitalized patients in all observed diagnostic categories.

Changes in laws that regulate involuntary hospitalization in psychiatric hospitals were also made in the neighboring countries during the previous decade. A situation similar to the one in Croatia (after the beginning of implementation of Law on Protection of Persons with Mental Disorders in January, 1998) occurred in the neighboring Austria, where involuntary hospitalizations in psychiatric hospitals and any other restriction of patient's freedom was regulated by 1991 law (21). Most psychiatrists (81%) were dissatisfied with the new legal situation because they saw negative effects for patients and they had to spend a lot of time on judicial matters (21). In Hungary, a country in post-communist transition like Croatia, the legal provisions concerning civil commitment of mentally ill patients have recently changed. The new act became effective in February 1995 (22). The main reason for the amendment was to harmonize the legal system with the European Convention on the Protection of Human Rights and Liberties. The need for treatment no longer justifies civil commitment, role of the court has become more important, and more emphasis is laid on the protection of the rights of patients in commitment proceeding. In spite of these advantageous changes, the regulation on the rights of committed patients is absent, and informed consent issues are not addressed in the new act. The 1991 Israeli "Treatment of the Mentally Ill Law" paid much attention to the protection of patients from unnecessary hospitalization in mental hospitals and to defining the rights and duties of patients who have been hospitalized, whether voluntarily or involuntarily (23). The new law defined strictly and clearly the grounds for which involuntary hospitalization is permitted and lists the rights of the hospitalized patient. Secondly, it specified clearly the procedure for the issue of a hospitalization order and distributes the power to issue such an order among various administrative bodies.

Our results conected involuntary hospitalizations with male sex and diagnoses of psychotic disorders. In the study that determined the factors leading to involuntary hospitalization of psychiatric patients in Newfoundland (24), involuntary patients were more likely than voluntary ones to be of male sex and to have a diagnosis of schizophrenia or mania, but were less likely to be suffering from depression or a neurotic disorder. In the study that examined factors contributing to the involuntary return of patients to a psychiatric emergency service in California, USA, the likelihood of involuntary return was increased by a psychotic diagnosis and indications of dangerousness at the initial evaluation (25). In the study that investigated sex-specific characteristics of involuntary hospitalized patients, they were more likely than voluntary patients to be of male sex and have a diagnosis of psychosis (26). In the study that examined a group of Indochinese patients in Oregon, the authors found that men predominated among the involuntary hospitalized patients (27). No difference in the number of involuntary hospitalized men and women during the first two years of the Law implementation is an interesting finding. It is related to hospitalizations under section of the Law regulating mental incompetence for a written consent. When this section was deleted from the Law, involuntary hospitalization of men became predominant.

In conclusion, our analysis showed that the adaptation of both the psychiatrist and the legal system was needed in the case of legal regulation of involuntary psychiatric hospitalization. Changes and supplements to the Law on Protection of Persons with Mental Disorders, in December 1999, led to a significant decrease in the number of involuntary hospitalizations. As in other countries with long-standing implementation of such a law, involuntary hospitalizations were related to male sex and diagnoses of psychotic disorders. Experiences in implementation of the Law on Protection of Persons with Mental Disorders during 1998 and 1999 led to changes and supplements to the Law, which improved the treatment procedure of persons with mental disorders. Further follow-up of the law practice is needed to make additional changes and supplements to the Law that would provide optimal care for patients with mental disorders.

References

1 World Health Organization. Atlas: country profiles on mental health resources. Geneva: WHO; 2001.

2 Republic of Croatia. Croatian law on protection of persons with mental disorders [in Croatian]. Narodne novine (Croatian Official Gazette) No. 11; 1997.

3 Goreta M, Jukić V. Croatian law on protection of persons with mental disorders – ideas, normatives, implementation, evaluation [in Croatian]. Zagreb: Vrapče Psychiatric Hospital; 2000.

4 Jukić V. Justifyability of involuntary hospitalizations of psychiatric patients: psychiatric evaluation [in Croatian]. Vještak 2001;2:49-54.
5 Jukić V, Goreta M. Croatian law on protection of persons with mental disorders: first results of implementation [in Croatian]. Socijalna psihijatrija 1999;27: 46-53.
6 Republic of Croatia. Croatian law on protection of persons with mental disorders: changes and additions [in Croatian]. Narodne novine (Croatian Official Gazette) No. 128; 1999.
7 Sanguineti VR, Samuel SE, Schwartz SL, Robeson MR. Retrospective study of 2,200 involuntary psychiatric admissions and readmissions. Am J Psychiatry 1996;153: 392-6.
8 Bruxner G, Burvill P, Fazio S, Febbo S. Aspects of psychiatric admissions of migrants to hospitals in Perth, Western Australia. Aust N Z J Psychiatry 1997;31: 532-42.
9 Singh SP, Croudace T, Beck A, Harrison G. Perceived ethnicity and the risk of compulsory admission. Soc Psychiatry Psychiatr Epidemiol 1998;33:39-44.
10 Davies S, Thornicroft G, Leese M, Higgingbotham A, Phelan M. Ethnic differences in risk of compulsory psychiatric admission among representative cases of psychosis in London. BMJ 1996;312:533-7.
11 Fennig S, Rabinowitz J, Fennig S. Involuntary first admission of patients with schizophrenia as a predictor of future admissions. Psychiatr Serv 1999;50:1049-52.
12 Maltsberger JT. Calculated risk taking in the treatment of suicidal patients: ethical and legal problems. Death Stud 1994;18:439-52.
13 Waltzer H. Malpractice liability in a patient's suicide. Am J Psychother 1980;34:89-98.
14 Kozumplik O, Jukić V. Psychiatric patients' experiences in complementary and alternative medicine (CAM), and in religious support – a pilot study. Coll Antropol 2002;26:137-47.
15 Teshome-Bahire W. Initiation of healers in Ethiopia. Coll Antropol 2000;24:555-64.
16 World Health Organization. International statistical classification of diseases and related health problems. 10th revision. Geneva: WHO; 1993.
17 Statistica [computer program]. Version 6.0. Tulsa (OK): StatSoft, Inc.; 2001.
18 Turković K, Dika M, Goreta M, Đurđević Z. Croatian law on protection of persons with mental disorders: comments and supplements [in Croatian]. Zagreb: Zagreb University Law School, Vrapče Psychiatric Hospital; 2001.
19 Jukić V, Goreta M. Croatian psychiatrist and their attitude towards the Croatian law on protection of persons with mental disorders [in Croatian]. Socijalna psihijatrija 1999;27:54-60.
20 Goreta M. Application of Croatian law on protection of persons with mental disorders in forensic psychiatry: critical overview [in Croatian]. Socijalna psihijatrija 1999;27:66-71.
21 Haberfellner EM, Rittmannsberger H. Compulsory commitment to a psychiatric hospital – the status in Austria [in German]. Psychiatr Prax 1996;23:139-42.
22 Dosa A. New legislation on civil commitment in Hungary. Med Law 1995;14:581-7.
23 Bazak J. Rights of the patient vs. rights of the public in the "Treatment of the Mentally Ill Law 1991". Isr J Psychiatry Relat Sci 1995;32:94-101.
24 Malla A, Norman RM, Helmes E. Factors associated with involuntary admission to psychiatric facilities in Newfoundland. CMAJ 1987;136:1166-71.
25 Segal SP, Akutsu PD, Watson MA. Factors associated with involuntary return to a psychiatric emergency service within 12 months. Psychiatr Serv 1998;49:1212-7.
26 Folnegović-Šmalc V, Uzun S, Ljubin T. Sex-specific characteristics of involuntary hospitalization in Croatia. Nord J Psychiatry 2000;54:55-9.
27 Leung PK, Faulkner LR, McFarland BH, Riley C. Indochinese patients in the civil commitment process. Bull Am Acad Psychiatry Law 1993;21:81-9.

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