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Involuntary Hospitalizations in the Psychiatric Hospital »Jankomir« Before and Following the Alterations and Amendments Made to ZZODS

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A B S T R A C T

Schizophrenia and other psychotic disorders as well as the delirium caused by abstinence from alcohol and accute state of drunkenness appear at the very top of the list of factors, which are positively correlated with involuntary hospitalization of patients. This is at the same time a confirmation of the data found in literature considering psychosis an essential factor of involuntary hospitalization; the same referring to the male sex was not, however, confirmed by the results obtained in the first and second research period. Regarding the positive correlation between schizophrenia and other psychotic disturbances, dementia, delirium and other cognitive impairments including the delirium caused by abstinence from alcohol and an accute state of drunkenness on the one side and the high rate of involuntary hospitalization on the other, there is no statistically significant difference between the period preceding and the period following the alterations and amendments to the Law on the protection of patients with mental disorders.

Key words: *involuntary hospitalization, legislation and jurisprudence, mental disorders, psychiatric hospital*

Introduction

Contrary to other clinical medical disciplines – with the exception of infectology[1] – the hospitalization of patients in psychiatry may be involuntary[2–5] for which there are psychiatric indications[6–10] and a legal basis[11–15] as well as social, psychological and ethical considerations[16–19]. Therefore, within the framework of a ge-

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neral process of democratization and humanization of the society and the raising of the level of legal protection of human and civilian rights of persons with mental disturbances as well as with the aim of adapting the legal system of the Republic of Croatia to the laws of the EU[21,22], a Law on the protection of persons with mental disorders (ZZODSS)[23] was passed in September 1997. The psychiatric indications and safety reasons for involuntary hospitalization of persons with mental disturbances in a psychiatric hospital have been defined by articles 22 and 21 of the Law: »A person with serious mental disorders which due to his/her mental condition seriously and directly threatens his/her own life or the life and safety of other persons may be hospitalized without his/her consent following the procedure of involuntary hospitalization« and »In case of an adult person unable to provide consent and which is not legally represented as well as in case of a child or a person with mental impairment without any working ability which is not able to give consent, the decision about his/her hospitalization in a psychiatric institution will be made by the court authorized to make decisions concerning involuntary hospitalization in an urgent procedure«[23]. Alterations and amendments to ZZODS were passed in November 1999 and they became valid on December 8, 1999[24]. According to this Law (article 21) only the assessment of a person's ability to provide oral (no longer written!) consent is required, while the article regarding the persons unable to give consent was omitted; the article 25 was supplemented by the responsibility of the psychiatrist to establish within 72 hours the existence of reasons for involuntary hospitalization in accordance with article 22 and to inform the County court about it within 12 hours[24–26]. According to the afore-mentioned alterations and amendments to ZZODS the psychiatric and legal conditions for the application of the procedure of involuntary hospitalization were changed, which created a possibility of comparing the dynamics rates of involuntary hospitalization of patients in the Psychiatric hospital »Jankomir« in the period preceding and the period following the aforementioned alterations and amendments to the Law on the protection of persons with mental disorders[27–29].

Patients and Methods

All the patients admitted for treatment in the investigated periods (from January 1, 1998 to December 7, 1999, and from December 8, 1999 to November 14, 2001) were divided into groups according to the following criteria: 1) voluntary hospitalized; 2) involuntary hospitalized; 3) sex; 4) initial diagnosis according to ICD-10[30]. The nosological ICD-10 group F00–F07.9 included dementia and other cognitive disorders, delirium and organically based affective disorders, ICD-10 group F-10–F10.4 included acute states of drunkenness, alcohol addiction and the delirium caused by alcohol consumption; ICD-10 group F20–F29 included schizophrenia, schizo-affective disorders and other psychotic disturbances; ICD-10 group F30–F34.9 included affective disorders; ICD-10 nosological group F40–F48.9 included anxiety and post-traumatic stress disorders; ICD 10 group F60–F69 included personality disorders; ICD-10 group F70–F72 included mental retardation; ICD-10 diagnostic group X60–X84 included suicide attempts. The data about patients were taken from admission records, illness history and court decisions passed in an out-of-court legal procedure. The obtained results were statistically processed by means of descriptive statistics methods and χ^2-test[31]. The statistic relevance was set at $p<0.01$ level and was calculated by means of Fisher's Exact test[31].

Results

During the investigated period running from January 1, 1998 to December 7, 1999 a total of 4,417 persons were admitted to the hospital for treatment out of which 3,648 (or 82.60%) voluntary and 769 (or 17.40%) involuntary. The sample of involuntary hospitalized persons included 438 males (9.99%) and 331 (7.5%) females (Tables 1 and 2), which is not a statistically relevant difference at the level of $p>0.01$ ($p=0.1058$).

The highest rate of involuntary hospitalized patients in the nosological group including schizophrenia and other psychotic disorders amounts to 502 or 65.3%, which is (in terms of involuntary hospitalizations) followed by alcoholism with 115 (or 14.9%), dementias and other cognitive disorders and delirium with 77 (or 10%), mental retardation with 36 (or 4.7%) and finally by affective disorders, suicide attempts, personality disorders and anxiety (Table 3). The difference between the rate of incidence of schizophrenia and other psychotic disorders on the one hand and alcoholism, dementia and other cognitive disorders on the other is statistically significant ($p<0.01$); the same occurs between the former group on the one hand and dementia and other cognitive disorders, delirium and organic affective disorders on the other.

In the investigated period running from December 8, 1999 to November 14, 2001 the total number of patients admitted to the hospital for treatment was 4,980, out of which number 4,781 (or 96%) were voluntary hospitalized and 199 (or 4%) were involuntary hospitalized. Within the sample of involuntary hospitalized patients there were 109 men (54.77%) and 90 (45.23%) women (Tables 4 and 5).

The observed difference in the proportion of involuntary hospitalized patients (out of the total number of hospitalized

TABLE 1
THE NUMBER OF HOSPITALIZATIONS AS WELL AS VOLUNTARY AND INVOLUNTARY PATIENTS

	Investigated period 01. 01. 1998. – 07. 12. 1999.					
	Number of hospitalizations		Voluntary hospitalizations		Involuntary hospitalizations	
	N	%	N	%	N	%
Males	2,633	59.60	2,195	49.70	438	9.90
Females	1,784	40.40	1,453	32.90	331	7.50
Total	4,417	100	3,648	82.60	769	17.40

TABLE 2
TOTAL AND RELATIVE NUMBER OF VOLUNTARY AND INVOLUNTARY HOSPITALIZED PATIENTS ACCORDING TO SEX

	Investigated period 01. 01. 1998. – 07. 12. 1999.			
	Voluntary hospitalized		Involuntary hospitalized	
	N	%	N	%
Males	2,195	60.17	438	56.96
Females	1,453	39.83	331	43.04
Total	3,648	100	769	100

TABLE 3
THE NUMBER OF INVOLUNTARY HOSPITALIZATIONS ACCORDING TO NOSOLOGICAL UNITS

Code ICD–10	Nosological unit	Investigated period 01. 01. 1998. – 07. 12. 1999. Involuntary hospitalizations	
		N	%
F00–F07.9	Dementia and other cognitive disorders, delirium, organic affective disorders	77	10.00
F10–F10.4	Alcoholism	115	14.90
F20–F29	Schizophrenia and other psychotic disorders	502	65.30
F30–F34.9	Affective disorders	16	2.10
F40–F48.9	Anxiety and PTSD	3	0.40
F60–F69	Personality disorders	7	0.90
F70–F72	Mental retardation	36	4.70
X60–X84	Suicide attempts	13	1.70

TABLE 4
THE NUMBER OF HOSPITALIZATIONS AND THE NUMBER OF VOLUNTARY AND INVOLUNTARY HOSPITALIZED PATIENTS

	Investigated period 08. 12. 1999. – 14. 11. 2001.					
	Number of hospitalizations		Voluntary hospitalized		Involuntary hospitalized	
	N	%	N	%	N	%
Males	2,864	57.50	2,755	55.30	109	2.19
Females	2,116	42.50	2,026	40.70	90	1.81
Total	4,980	100.00	4,781	96.00	199	4.00

TABLE 5
TOTAL AND RELATIVE NUMBER OF VOLUNTARY AND INVOLUNTARY HOSPITALIZED PATIENTS ACCORDING TO SEX

	Investigated period 08. 12. 1999. – 14. 11. 2001.			
	Voluntary hospitalized		Involuntary hospitalized	
	N	%	N	%
Males	2,755	57.62	109	54.77
Females	2,026	42.38	90	45.23
Total	4,781	100	199	100

patients) between the two observed periods is statistically highly significant (χ^2 =454.3896, df=1, p<0.01). In the first observed period the involuntary hospitalized patients equaled 17% of all hospitalized patents, whereas in the second observed period they equalled 4%. At the same time the total number of hospitalizations increased (Figure 1).

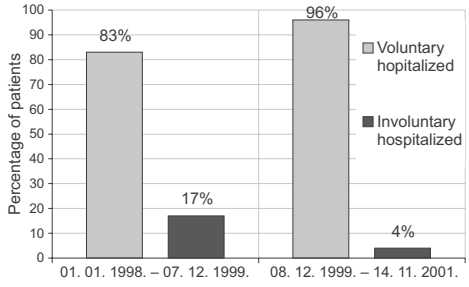

Fig. 1. The comparison of voluntary and involuntary hospitalizations (in percentages) in the two observed periods (1.1.98–7.12.99. and 8.12–14.11.01) in the Psychiatric hospital »Jankomir«.

The obtained difference in the ratio of voluntary and involuntary hospitalized males (χ^2=250.5427, df=1, p<0.01) as well as females (χ^2=204.0789, df=1, p<0.01) between the two investigated periods is statistically highly significant.

The sex structure of the involuntary hospitalized patients is not statistically significantly (p>0.6) different in the two investigated periods. Therefore, on the grounds of this investigation it cannot be claimed that the change of law had a differential influence on involuntary hospitalization of males and females.

The highest rate of involuntary hospitalized patients was again in the nosological group including schizophrenia and other psychotic disorders 133 or 66.9%, which is followed by ICD-10 group of alcoholism with 35 (17.6%), dementias and other cognitive disorders with 10 (5%), mental retardation with 6 (2.5%), affective disorders with 5% (2.5%), anxiety and PTSD with 4 (2%), suicide attempts with 4 (2%) and personality disorders with 3 (1.5%) (Table 6).

Discussion

Following the alterations and amendments to the ZZODS which started to be implemented on December 8, 1999, the rate of involuntary hospitalization of patients was drastically reduced – from 17.4% to 4% – which points to the fact that legal factors played the main role in creating and maintaining the high rate of involuntary hospitalization. Schizophrenia and other psychotic disorders, dementia, delirium and different cognitive disorders and the delirium caused by abstinence from alcohol or an accute state of drunkenness as well as delirium and other organic affective disorders are found

TABLE 6
THE NUMBER OF INVOLUNTARY HOSPITALIZED PATIENTS ACCORDING TO NOSOLOGICAL UNITS

Code ICD–10	Nosological unit	Investigated period 08. 12. 1999. – 14. 11. 2001. Involuntary hospitalized N	%
F00–F07.9	Dementia and other cognitive disorders, delirium, organic affective disorders	10	5.00
F10–F10.4	Alcoholism	35	17.60
F20–F29	Schizophrenia and other psychotic disorders	133	66.90
F30–F34.9	Affective disorders	5	2.50
F40–F48.9	Anxiety and PTSD	4	2.00
F60–F69	Personality disorders	3	1.50
F70–F72	Mental retardation	5	2.50
X60–X84	Suicide attempts	4	2.00

at the very top of the list of factors with a positive correlation with involuntary hospitalization. This also confirms the validity of data found in literature pointing to psychosis as the essential cause of involuntary hospitalization, while sex – male – as a factor of positive correlation has not been confirmed by the results obtained in the first and second research period. There is no statistically relevant difference between the period before and the period after alterations and amendments to the Law on the protection of persons with mental disorders concerning a positive correlation between schizophrenia and other psychotic disorders, dementia, delirium and different cognitive disorders and the delirium caused by abstinence from alcohol or an accute state of drunkenness with the high rate of involuntary hospitalization.

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PRISILNE HOSPITALIZACIJE U PSIHIJATRIJSKOJ BOLNICI »JANKOMIR« PRIJE I POSLIJE IZMJENA I DOPUNA ZZODS

S A Ž E T A K

Shizofrenija i drugi psihotični poremećaji te delirij uzrokovan apstinencijom od alkohola i akutno opito stanje u samom su vrhu ljestvice čimbenika koji su u pozitivnoj korelaciji s prisilnim smještajem bolesnika. Ujedno je to i potvrda podataka iz literature o psihozi kao bitnom čimbeniku prisilne hospitalizacije dok isto za muški spol kao čimbenik pozitivne korelacije, nisu potvrdili rezultati dobiveni u prvom i drugom razdoblju istraživanja. U pozitivnoj korelaciji shizofrenije i drugih psihotičnih poremećaja, demencije; delirija i drugih kognitivnih poremećaja te delirija uzrokovanog apstinencijom od alkohola i akutnog opitog stanja s visokom stopom prisilnog smještaja bolesnika, nema statistički značajne razlike između razdoblja istraživanja prije i poslije izmjena dopuna Zakona o zaštiti osoba s duševnim smetnjama.