Hetero-Aggressive Outbursts in Patients' Behaviour in Emergency Psychiatry

Katarina Djokić-Pješčić[1], Radmila Ristić-Dimitrijević[1], Milutin Nenadović[1,2], Slobodan Jovičić[1], Sonja Nešić[1], Tatjana Rajčić[1], Tatjana Vlašković[1], Nikolaos Klidonas[1]

[1]Special Hospital for Mental Disorders "Dr. Laza Lazarević", Belgrade, Serbia;
[2]Medical Faculty, University of Priština, presiding in Kosovska Mitrovica, Serbia

SUMMARY

Introduction Hetero-aggressive behaviour in patients with mental disorders is frequent and requires special skills of doctors and other medical staff in order to urgently protect the patient and indicate hospitalization.

Objective The objective of this paper was to examine the frequency of the most common diagnostic categories in psychiatric patients with hetero-aggressive behaviour. The secondary objective was to examine aspects of realized hospitalization (voluntary, involuntary) and socio-demographic characteristics of these patients.

Methods The sample was formed of 100 patients who expressed hetero-aggressive behaviour just before and during admission for hospital treatment. The data was collected from auto-anamnesis and hetero-anamnesis, and they were based on general somatic, neurological and psychiatric examination. The statistical analysis used descriptive analysis and Pearson's χ^2-test.

Results The frequency of the most common diagnostic categories was: F20-F29 73%; F10-F19 19%; F60-F69 11%; F00-F09 8%; F30-F39 and F70-F79 6%. Involuntary hospitalization was implemented in 56%. Socio-demographic characteristics of examinees revealed that the most common were: male gender (63%) and younger age, dominant secondary school qualification (74%), unmarried (76%), unemployed (76%), frequently repeated hospitalizations (66%).

Conclusion The most common diagnostic categories to which the patients with hetero-aggressive behavioural outbursts belonged were from the schizophrenic circuit, followed by substance abuse, personality disorders, etc. Involuntary hospitalization was the most common form of hospitalization in patients with violent behaviour. Socio-demographic characteristics of examinees revealed this profile as the most common: male gender, younger age, secondary education, unmarried and unemployed, repeatedly hospitalized.

Keywords: aggressive behaviour; psychiatric patients; emergency psychiatry

INTRODUCTION

Human aggression and violence are, unfortunately, common phenomena that harm both individuals and the whole society. Around 1.43 million people worldwide are mortally hurt by acts of violence [1]. Aggression can be individual or within a certain group, demanding a careful psychiatric analysis of various aspects of aggression in clinical, forensic or school conditions, as well as consideration of causes and treatment of aggressive individuals [1, 2]. Findings of certain studies indicate that only 10% of homicidal persons were not psychiatrically diagnosed, while 20% were diagnosed with a psychotic disorder, and 54% were primarily or secondarily diagnosed with personality disorder [2]. It is often necessary to implement emergency hospitalization in order to protect the entourage from the violent patient's behaviour.

Aggression can be defined as any action (verbal or physical) taken with intention to harm someone in any way, regardless whether it was fully carried out [3]. There are several theories dealing with motives of aggressive behaviour: 1) biological theories – aggression is a consequence of a genetic abnormality, high level of testosterone, disorder of neuromodulators level, seasonal impacts of light to serotonergic activity; 2) instinctivistic theories bring down the aggression to instincts; 3) frustration theories – the aggression is response to a frustration caused by stimulation; 4) social learning theories, i.e. theory of corroboration of aggressive behaviour; 5) cognitive theories – the aggression is the result of cognitive factors [1, 3, 4, 5].

The hetero-aggression in emergency psychiatry is most commonly caused by: 1) hallucinations; 2) paranoid elaboration of reality; 3) low threshold of tolerance to frustration, and impulse decontrol of patients with personality disorders (PL); 4) abuse of ethyl and other psychoactive substances (PAS); 5) acute and delayed reactions to stress; 6) psycho-organic syndromes [1].

OBJECTIVE

Main objective of this paper was to examine the frequency of the most common diagnostic categories represented in patients with hetero-aggressive behavioural outbursts. Secondary objectives: to examine the forms of realized

Correspondence to:
Radmila RISTIĆ-DIMITRIJEVIĆ
Special Hospital for Mental Disorders "Dr. Laza Lazarević"
Višegradska 26, 11000 Belgrade
Serbia
rristic@cepelin.net

hospitalizations (voluntary, involuntary) and some socio-demographic characteristics of hetero-aggressive patients.

METHODS

The sample was formed of 100 patients who expressed hetero-aggressive behaviour just before and during admission to hospital treatment at the Special Hospital for Mental Disorders "Dr. Laza Lazarević". Random sampling method was used for its formation. The survey was carried out at the SHMD "Dr. Laza Lazarević" in Belgrade from January to October 2011. The data were collected from auto-anamnesis and hetero-anamnesis, and they were based on general somatic, neurological and psychiatric examination, while some additional examinations (psychological tests, EEG, CT, NMR) were conducted as needed. Diagnostic categories were determined by the criteria of the International Classification of Diseases ICD-10. The research fulfilled ethical criteria in the sense that all subjects signed voluntary participation, and also it was approved by the Ethics Committee of the Hospital.

The statistical examination used descriptive analysis and Pearson's Chi Square test (contingency coefficient and Cramer's V).

Table 1. Diagnosis* form of hospitalization (number of patients)

Diagnosis	Form of hospitalization		Total*
	Involuntary	Voluntary	
F00–F09	3 (3.0%)	5 (5.0%)	8 (8.0%)
F10–F19	10 (10.0%)	9 (9.0%)	19 (19.0%)
F20–F29	42 (42.0%)	31 (31.0%)	73 (73.0%)
F30–F39	3 (3.0%)	3 (3.0%)	6 (6.0%)
F60–F69	6 (6.0%)	5 (5.0%)	11 (11.0%)
F70–F79	3 (3.0%)	3 (3.0%)	6 (6.0%)

* Some patients received more than one diagnosis, which is primarily related to co-morbidity of personality disorder and addiction diseases

RESULTS

Table 1 gives an overview of the frequency of diagnostic categories of examinees with regard to the applied form of hospitalization (involuntary, voluntary).Table 2 gives an overview of socio-demographic characteristics of examinees with regard to the applied form of hospitalization (involuntary, voluntary).

By crossing between certain variables and by application of χ^2-test, we received the following outcomes:

- Form of hospitalization and marital status

According to the statistics, unmarried and divorced patients were significantly more likely to be involuntarily hospitalized (p=0.04, Cramer's V=0.249; Contingency Coefficient – CC =0.241);

- Diagnostic category and marital status

Statistically, F20-F29 diagnostic categories showed a significantly higher frequency of unmarried patients (p=0.00, Cramer's V=0.458; CC=0.417); F00-F09 diagnostic categories showed a statistically higher frequency of married patients (p=0.00, Cramer's V=0.554; CC=0.484);

- Diagnostic category and employment status

According to the statistics, the retired patients were most represented in F00-F09 diagnostic categories (p=0.004, Cramer's V=0.330; CC=0.313); statistically, the unemployed were significantly more frequent in F10-F19 (p=0.04, Cramer's V=0.250; CC=0.243) and F20-F29 (p=0.05, Cramer's V=0.238; CC=0.232);

- Gender and F10-F19 diagnosis

Statistically, PAS abuse was significantly more common in males than in females (p=0.03, Cramer's V=0.213; CC=0.208);

- Gender and F30-F39duagnosis

Statistically, affective disorders were in a significant way more common in female than in male population (p=0.01, Cramer's V=0.242; CC=0.236);

Table 2. Socio-demographic characteristics* and form of hospitalization (number of patients)

Socio-demographic characteristics		Form of hospitalization		Total
		Involuntary	Voluntary	
Gender	Male	34 (34.0%)	29 (29.0%)	63 (63.0%)
	Female	22 (22.0%)	15 (15.0%)	37 (37.0%)
Age (years)	18–30	16 (16.0%)	12 (12.0%)	28 (28.0%)
	31–40	20 (20.0%)	12 (12.0%)	32 (32.0%)
	41–50	9 (9.0%)	3 (3.0%)	12 (12.0%)
	>50	11 (11.0%)	17 (17.0%)	28 (28.0%)
Education level	Elementary school	9 (9.0%)	10 (10.0%)	19 (19.0%)
	Secondary school	41 (41.0%)	33 (33.0%)	74 (74.0%)
	College (3 years)	2 (2.0%)	0 (0.0%)	2 (2.0%)
	University	4 (4.0%)	1 (1.0%)	5 (5.0%)
Marital status	Married	8 (8.0%)	9 (9.0%)	17 (17.0%)
	Single	41 (41.0%)	35 (35.0%)	76 (76.0%)
	Divorced	7 (7.0%)	0 (0.0%)	7 (7.0%)
Employment status	Employed	5 (5.0%)	6 (6.0%)	11 (11.0%)
	Unemployed	45 (45.0%)	31 (31.0%)	76 (76.0%)
	Retired	6 (6.0%)	7 (7.0%)	13 (13.0%)
Hospitalization order	First	16 (16.0%)	18 (19.0%)	34 (34.0%)
	Repeated	40 (40.0%)	26 (26.0%)	66 (66.0%)

- Age and F00-F09 and F70-F79 diagnoses

Statistically, F00-F09 diagnostic category was significantly more represented in the age over 50 years (p=0.001, Cramer's V=0.394; CC=0.366), while mental retardation was more common in patient aged up to 30 years (p=0.019, Cramer's V=0.316; CC=0.302); also, statistically, patients with mental retardation belonged to the very low educational level (p=0.02, Cramer's V=0.308; CC=0.295).

DISCUSSION

The obtained results (Table 1) related to the frequency of the most common diagnostic categories to which belong patients with hetero-aggressive behavioural outbursts are: 1) schizophrenia, schizotypal disorders and delusions disorders (F20-F29) in 73%; 2) mental disorders and behavioural disorders caused by the use of psycho-active substances (F10-F19) in 19%; 3) personality and behavioural disorders of adults (F60-F69) in 11%; 4) organic, including symptomatic, mental disorders in 8%; 5) mood disorders (F30-F39) and mental retardation (F 70-F79) both represented with 6%.

Thus obtained the frequency distribution of diagnostic categories was expected, because it is in accordance with the clinical features of the above mentioned diagnoses which usually include aggressive behaviour. Also, these findings are in accordance with researches of other authors [1, 6].

In search for predictive factors of violent behaviour in psychiatric patients, some researches found that risk of violent behaviour is in the basis of four personality dimensions: impulse control, affective regulation, narcissism and paranoid cognitive stile [7, 8, 9]. According to these researches, bad impulse control and regulation of affects increase the risk of violent behaviour in individuals with primary and co-morbid addiction diseases, while paranoid cognitive stile and narcissism increase the risk of violent behaviour in individuals with disorders belonging to schizophrenic circuit and personality disorders.

With regard to socio-demographic characteristics of patients who expressed behavioural hetero-aggression (Table 2), the following profile was obtained: more commonly males (63%) of younger age, a slightly lower representation of the age of 41-50 years, dominant secondary education (74%), mostly unmarried (76%), and dominantly unemployed (76%). Regarding the hospitalization order, the patients with violent behaviour were very often hospitalized repeatedly (66%), which is in accordance with findings of other researchers [10]. The results related to some of demographic and clinical characteristics of patients with violent behaviour as younger age, male gender, unemployment, frequently repeated hospitalizations is consistent with some findings of other authors [6, 11, 12, 13]. A higher frequency of male population in patients with violent behaviour matches with results of other researchers [12, 13], as well as of the papers that report a significant correlation between a high level of testosterone and occurrence of aggression [1]. There are findings indicating that male aggression is more common in general population, while it is not always case in psychiatric population; also, there are findings pointing out that female behavioural aggression is more often accompanied with psychotic symptomatology, while the hetero-aggression in male population is often related to substance abuse, delinquency, and absence from work [14]. These different findings could be used as a foundation for new researches of correlation between the gender and aggression.

Greater representation of hetero-aggression in younger age and in unmarried examinees [6, 11, 12, 13] could be interpreted by emotional instability of personality, hyper sensibility, as well as by inadequate maturity, and it is consistent with neurobiological theories on aggression [1]. On the other hand, the occurrence of aggressive behaviour in elderly population would be in favour of acute, and even more often, chronic organic psycho-syndrome – dementia (reduction of cortical volume, decreased frontal inhibition, etc.) [1, 15]. Physical aggression in dementia appears under the influence of delusions, hallucinations, sleep disorder, cognitive insufficiency, but statistically, aggressive behaviour in elderly individuals is significantly related to the symptoms of depression; if observed in that way, it is possible to prevent the occurrence of aggressive behaviour in elderly population by depression treatment [15-20]. The findings of some researches, who indicate that elderly aggressive persons are usually married, and are also in poor general health condition, are consistent with our finding on the marital status of aggressive persons of old age [17].

Frequent unemployment in patients with hetero-aggressive outbursts [11] in behavioural sphere can be partly interpreted by a low threshold of tolerance to frustration, frequent conflict relations with colleagues, as well as by the problem related to abuse of ethyl and other psychoactive substances.

In terms of the form of implemented hospitalization of patients with violent behaviour; the expected result was obtained, i.e. the most frequently carried out hospitalizations were involuntary ones (56%). As stated in the Introduction, the need for involuntary hospitalization occurs in order to protect the entourage (individuals and material goods) from the patient's aggressive behaviour, because sometimes the patient's destructiveness carries a high homicidal risk [2, 17].

CONCLUSION

The most common diagnostic categories to which belong the patients with hetero-aggressive behavioural outbursts are: F20-F29, F10-F19, F60-F69, F00-F09, F30-F39 and F70-F79. Involuntary hospitalization is the most common form of hospitalization in patients with violent behaviour. Socio-demographic characteristics of examinees reveal the following profile as the most common: male gender, younger age, secondary education, unmarried, unemployed, and repeatedly hospitalized.

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Хетероагресивни испади у понашању болесника у оквиру ургентне психијатрије

Катарина Ђокић-Пјешчић[1], Радмила Ристић-Димитријевић[1], Милутин Ненадовић[1,2], Слободан Јовичић[1], Соња Нешић[1], Татјана Рајчић[1], Татјана Влашковић[1], Николаос Клидонас[1]

[1]Специјална болница за психијатријске болести „Др Лаза Лазаревић", Београд, Србија;
[2]Медицински факултет, Универзитет у Приштини, седиште у Косовској Митровици, Србија

КРАТАК САДРЖАЈ

Увод Хетероагресивност у понашању особа оболелих од душевних болести честа је појава која захтева посебну вештину лекара и другог медицинског особља ради хитног збрињавања болесника и упућивања на болничко лечење.

Циљ рада Главни циљ рада био је да се испита учесталост најчешћих дијагностичких категорија код психијатријских болесника с хетероагресивним понашањем. Споредни циљеви били су испитивање видова реализованих хоспитализација (добровољна, присилна) и социодемографских одлика ових болесника.

Методе рада Испитивани узорак је чинило 100 болесника код којих се испољила хетероагресивност пре или током пријема у болницу. Подаци су прикупљени из анамнезе, на основу соматског, неуролошког и психијатријског прегледа. За статистичку обраду података коришћени су Пирсонов χ^2-тест и дескриптивна анализа.

Резултати Учесталост најчешћих дијагностичких категорија: *F20-F29* 73%; *F10-F19* 19%; *F60-F69* 11%; *F00-F09* 8%; *F30-F39* и *F70-F79* по 6%. Присилна хоспитализација је примењена у 56% случајева. Од социодемографских одлика утврђено је да је било више мушкараца (63%) и особа млађег животног доба, болесника са средњом стручном спремом (74%), који нису у браку (76%) и који су незапослени (76%), те да су чешће биле поновљене хоспитализације (66%).

Закључак Најчешће дијагностичке категорије којима припадају болесници с хетероагресивним понашањем су из схизофреног круга; следи злоупотреба ПАС, поремећаји личности итд. Присилно болничко лечење је био најчешћи вид хоспитализације, а најчешћи социодемографски профил био је: мушкарци, млађе животно доба, средња стручна спрема, нису у браку, незапослени, поновљене хоспитализације.

Кључне речи: хетероагресија; психијатријски болесници; ургентна психијатрија