UDK 0/9 ISSN 0420-0950

МАКЕДОНСКО НАУЧНО ДРУШТВО – БИТОЛА
РЕПУБЛИКА МАКЕДОНИЈА
MACEDONIAN SCIENCE SOCIETY – BITOLA
REPUBLIC OF MACEDONIA

П Р И Л О З И
CONTRIBUTIONS

БИТОЛА/ BITOLA, 2018

ПРИЛОЗИ CONTRIBUTION	XIV	Бр. 25/26	1 - 68	БИТОЛА, 2018

Izabela Filov[1],
Gordana Ristevska Dimitrovska[2],
Domnika Rajchanovska[3],
Viktorija Prodanovska Stojchevska[4],
Tanja Jovanovska[5]

SOCIAL CORRELATES AS A RISK FACTORS FOR VIOLENCE AMONG INDIVIDUALS WITH MENTAL DISORDERS

Abstract

Violent behavior occurs in a social system that includes a person who has a certain life history, a certain state of health or a disorder and interaction with certain social circumstances. Biological and environmental interaction is responsible for violence and aggression. Theories of social teachings indicate that violent behavior is a product of former experiences, which include predisposing environmental conditions. Permanent displays of violence in the media are desetting the viewer of violence. The aim of the paper was to determine the impact of risk factors of a social nature, which determine the violent behavior among people with mental disorders. The study is prospective with a retrospective approach.The research was conducted at the Psychiatric Hospital Demir Hisar, Psychiatric Hospital "Skopje" - Skopje and the Center for Mental Health Prilep. The time frame for the research was between May 2014 and May 2015. For the needs of the research, a conducted interview was created for assessing the social / demographic characteristics, as well as obtaining data related to the crime, that is, the type of violence. The interview with patients was consisted of 7 questions.The investigation showed following results: the dominant age is 32 years in the group of perpetrators of violence, 46 % of the respondent are unemployed, 73 % of them from the urban environment, 46% with high school, 36 % of them married. The most dominant diagnosis is schizophrenia and schizophrenic disorders with around 50 %,, in the 56% of the respondents the noted criminal act had been the first one.

Key words: *mental disorder, violence, social factors*

Introduction

The myth that the mental disorder in its very nature means the manifestation of violence persists for centuries with a trend of intensifying of these convictions, despite the fact that in the last decades, many campaigns have been made to reduce fear in the public.There are still no definite answers to the questions how much the

---

[1] MD. PhD, University “St. Kliment Ohridski”,Higher Medical School Bitola, Tel: +389 75 367 052, e-mail: belafilov@gmail.com

[2] M.D. PhD, Higher medical school Bitola, gordana.md@gmail.com

[3] M.D. PhD, Higher medical school Bitola, dr.rajchanovska@gmail.com

[4] M.D. PhD, Higher medical school Bitola, prodanovska.stojchevska@gmail.com

[5] M.D. PhD, Higher medical school Bitola, tanjajovanovska@gmail.com

manifestation of violent behavior correlates with the very nature of mental disorders under different circumstances or is it associated with other developmental and life historical variables. Violent behavior occurs in a social system that includes a person who has a certain life history, a certain state of health or a disorder and interaction with certain social circumstances.Biological and environmental interaction is responsible for violence and aggression. It is therefore necessary to pay attention to the psychosocial factors that contribute to the development of violent behavior. Theories of social teachings indicate that violent behavior is a product of former experiences, which include predisposing environmental conditions. Permanent displays of violence in the media are desetting the viewer of violence. (Griffithet all., 2014) Swanson and his colleagues identify numerous environmental factors that are significantly related to violence, including homelessness and testimony or experience of violence. (Swanson et al., 2002)

2. Objective

The aim of the paper was to determine the impact of risk factors of a social nature, which determine the violent behavior among people with mental disorders.

3. Methods and materials

The study is prospective with a retrospective approach. The research was conducted at the Psychiatric Hospital Demir Hisar, Psychiatric Hospital "Skopje" - Skopje and the Center for Mental Health Prilep. The time frame for the research was between May 2014 and May 2015.The investigated group consisted of 89 patients admitted to the Psychiatric Hospital Demir Hisar, most of them patients in the forensic psychiatric department and the forensic psychiatric department at the Psychiatric Hospital "Skopje" Skopje. These are patients who have committed a crime and have a diagnosis of psychiatric disorder according to ICD 10. Based on that diagnosis, a safety measure has been established "keeping and treatment in a psychiatric institution." The research excludes the individuals who are admitted to the court psychiatric departments with diagnosisF 11 "Narcotic Dependency. After obtaining consent for participating in the research, patients were interviewed and the envisaged questionnaires were used.Respondents from the investigated group are marked as perpetrators of the criminal act- (PCA).The control group consists of 120 patients, some of them are beneficiaries of the Center for Mental Health Prilep, and some patients in the Psychiatric Hospital Demir Hisar, who are not perpetrators of the crime. The control group is divided into two subgroups. One subgroup consists of 60 patients who did not manifest violence in their history of illness. This group is designated as a control group without violence CG WV. The other nurse consists of 60 patients at the PHI Psychiatric Hospital Demir Hisar who were forcibly hospitalized from May 2008 to June 2010 and who according to sex and diagnosis responded to the conditions of the research. This subgroup is a control group for forced hospitalization CG FH. the research, besides the measuring instruments, data from the clinical psychiatric interview with the patients themselves, medical histories, psychological findings and judicial psychiatric expertise were used.For the needs of the research, a conducted interview was created for assessing the social / demographic characteristics, as well as obtaining

data related to the crime, that is, the type of violence. The interview with patients was consisted of 6 questions. In addition to the interview, in order to obtain comprehensive data related to this sphere, medical histories and forensic psychiatric expertise were also used.

In the methodology of the research, it is important to note that a whole forensic population is located on the forensic departments in the two psychiatric hospitals in the Republic of Macedonia.

Results

According to the sex, 89 patients in the examined group are significantly dominated by the male sex, 88 are men and 1was a women.

Regarding the **age representation**, the perpetrators of the crime with 32 (35.9%) are dominated by patients aged 31 to 40 years.(table 1).

Table 1. Age of respondents

Age			CG WV		CG FH	
	N	%	N	%	N	%
20-30	14	15.73	7	11.67	8	13.33
31-40	32	35.96	18	30.0	14	23.33
41-50	22	24.72	15	25.0	11	18.33
51-60	12	13.48	17	28.33	20	33.33
61-70	7	7.87	3	5.0	7	11.67
> 70	2	2.25	0	0	0	0
Total	89	100	60	100	60	100

Regarding of the work engagement, the unemployed are the largest group among the respondents who committed the criminal act - 41 (46.1%), followed by the workers with 24 (26.97%) respondents, and only 8 (9%) of the patients with violent behavior are pensioners. The highest number of respondents without violence is 39 (65%), the same number of respondents in this group are employees and employees (7.7%), while at least 5 (8.3%) patients in this group are pensioners.

Table 2. Work engagement

Work engagement	PV		CG WV		CG FH	
	N	%	N	%	N	%

Unemployed	41	46.07	39	65.0	31	51.67
Worker	24	26.97	7	11.67	5	8.33
Farmer	11	12.36	2	3.33	8	13.33
Officer	5	5.62	7	11.67	4	6.67
Retiree	8	8.99	5	8.33	12	20.0
No occupation	0	0	0	0	0	0
Total	89	100	60	100	60	100

Regarding the origin of the respondents, 51 (57.3%) of the respondents in the crime group, 44 (73.3%) of the control group without a criminal offense, and 42 (70%) of the group with forced hospitalization originate from the urban environment, while 38 42.7%) perpetrators of criminal acts, 16 (26.7%) cases with psychiatric disorder without violence, and 18 (30%) patients forcibly hospitalized from rural areas.

Regarding education, primary and secondary education are the most frequent categories of education among the examinees from all three analyzed groups, that is, about 80% of patients with mental disorders belonging to the analyzed groups have completed primary or secondary education. (table 4)

Table 3. Education of the respondent

Education	PV		CG WV		CG FH	
	N	%	N	%	N	%
Elementary	37	41.57	20	33.33	23	38.33
High school	41	46.07	31	51.67	27	45.0
Collage	1	1.12	2	3.33	3	5.0
Faculty	0	0	7	11.67	4	6.67
No education	10	11.24	0	0	3	5.0
Total	89	100	60	100	60	100

Investigating **marital relations** in the three examined groups, it was concluded that there was no statistically significant difference.(table 4)

Table 4.Marital status

Marital status	PV		CG WV		CG FH	
	N	%	N	%	N	%
Married	36	40.45	24	40.0	18	30.0
Unmarried	35	39.33	28	46.67	35	58.33
Widow/widower	5	5.62	0	0	0	0
Divorced	13	14.61	8	13.33	7	11.67
Total	89	100	60	100	60	100

Regarding diagnostic entities, in our research, the most commondisorder is paranoid schizophrenia with 33.71% in the perpetrators of the crime of murder. Second, according to in the same group, according to the ICD 10, personality disorders are diagnosed with 19%.

Table 5. Diagnostic criteria

Diagnosis according ICD 10	PV		CG WV		CG FH	
	N	%	N	%	N	%
F20.0	30	**33.71**	36	60.0	45	**75.0**
F21-25	14	**15.73**	18	30.0	8	13.33
F30	0	0	3	5.0	1	1.67
F31	0	0	0	0	0	0
F32	0	0	2	3.33	0	0
F32.3	0	0	1	1.67	0	0
F60	17	**19.1**	0	0	1	1.67
F60 F20.0	12	13.48	0	0	3	5.0
F60 F21	6	6.74	0	0	1	1.67

F60 F22	3	3.37	0	0	0	0
F60 F23	7	7.87	0	0	1	1.67
Total	89	100	60	100	60	100

Regarding the history of criminal acts among the respondents, it is evident that in the group of perpetrators of criminal acts more than 50 per cent (59,55%) of them committed the crime first (table 6).

Table 6. The history of crime

Crime	PV	
	N	%
First crime	53	59,55
Recidive	36	40.45
No crime	0	0
Total	89	100

Disscussion

A number of demoghrafic variable is considered to be of interest in understanding any potential realtionship between mental disorders and violent or criminal beahviour and among these is biological sex. In the general population, males are much more likely than females to engage in violent and criminal behavior (Bonta, Law, & Hanson, 1998). In communitybased epidemiological studies of self-reported violence and in studies of criminality among persons with mental disorder, male sex is a significant predictor of violent and criminal behavior (Buckleyet all. 2003; Lovell, Gagliardi, & Peterson, 2002; Robbins, Monahan, & Silver, 2003).

Regarding poor engagement in educational and employment pursuits, whichgenerally are prosocial activities, is a risk factor for criminal behavior. Having a serious mental illness is strongly linked with relatively low educational levels and under or unemployment (Draine, Salzer, Culhane, &Hadley, 2002). For example, in a study of over 500 patients with schizophrenia, (Mueser,Salyers&Mueser, 2001) found that only 10--21% of participants were competitively employed during a two year observation period.Problems with family and romantic partners are a weak, but relatively robust risk factor for criminalbehavior in both adults (Derszon,2010)and adolescents (Leschied,Chiodo,Nowicki,&Rodger,2008).Family members are often primarily responsible for providing housing, financial support, and emotional suppor for people at risk for criminal behavior

(Naser&LaVigne,2006).Regarding of the origin of respondents results show that there is predominant number of respondents from both groups who live in an urban environment. It is explaned by many studies that confirm that the effects of infrastructure (population density, accessto green space), economic issues (rates of employment, workingconditions), environmental pollutants (air pollution, noise, toxins,light) and social conditions (social coherence, density of socialnetworks) should be considered and weighted in order to identify the most potent contributors to social stress (Lederbogen et all. 2013; Fonken et all, 2011; Heim, C., Binder, E.B., 2012.)Low educational level is astrong markers for mental illness (Lund at all.2011; Patel et all.2010), but also rates of violence increased with lower education level. In theLS/CMI study (Skeem eal.,2008), parolees with mentalillness score dashigh (lower education, lowengagement in prosocialle isurepursuits) or higher (employmentinstability; family and marital problems) than those without mental illness across the risk factors. Inpart, those with mental illness may suffer greater (Rueve M, Welton R.S, 2008; Stanton et all, 1997) Psychiatric disorders associated with violence are wide-ranging. A number of studies have found a relationship between mental disorder and criminality or violence (Sirotich,2008). It is important to note, however, that although these studies found an increased relative risk of criminality among persons with major mental disorders(MMD), the absolute risk of crime among persons with MMD is relatively modest.(Fazel & Grann, 2006; Corrigan& Watson, 2005; Stueve & Link, 1997). Although many studies suggest that people with schizophrenia are at increased risk of manifestation of violence (Mullen Paul E., 2006; Swanson et all, 2006)in our study the number of schizophrenic patients in examined group is lower compared to the control group. It is interesting to note that in this study in the experimental group there is substantial stepped on comorbidity with antisocial personality disorder and that combination is in a higher correlation with the manifestation of violence than schizophrenia symptoms on alone basis.The best predictor offuturebehaviorispast,likebehavior. For that reason, it is not surprising that a history of criminal behavior (particularlychronic, frequent, and with early onset) is one of the most robust predictors of criminal recidivism (Campbell, French,& Gendreau, 2009; Cottle, Lee & Heibrun, 2001; Gendreau, Little, & Goggin,1996; Mulder, Brand, Bullens,& Marle, 2011).

References

1. Bonta J[1], Law M, Hanson K. (1998),The Prediction of Criminal and Violent Recidivism among Mentally Disordered Offenders: A Meta-Analysis Psychological Bulletin 123(2):123-42 · March *with* 10,336 Reads
2. Buckley PF, Noffsinger SG, Smith DA, et al. (2003).Treatment of the psychotic patient who is violent *Psych Clin N Am.* 26231–272 [PubMed]
3. Campbell,M.A.,French,S.,&Gendreau,P.(2009).The prediction of violence in adult offenders:CrossRefMedlineWeb of Science
4. Corrigan, P. W., & Watson, A. (2005). Findings from the National Comorbidity Survey on the frequency of violent behavior in individuals with psychiatric disorders. Psychiatry Research, 136, 153–162

5. COTTLE CINDY C., RIA J. LEE, KIRK HEILBRUN.(2001) The Prediction of Criminal Recidivism in Juveniles.Criminal Justice and Behavior
6. Derzon,J.H.,(2010).The correspondence of family features with problem, aggressive, criminal,and violent behavior: A meta-analysis.*Journal of Experimental Criminology,63,* 263-292.
7. Draine,J.,Salzer,M,.S.,Culhane,D.P.,&Hadley,T.R.(2002).Role of social disadvantage in crime, joblessness, and homelessness among persons with serious mental illness. *PsychiatricServices,53*, 565---573.
8. Fazel, S., & Grann, M. (2006). The population impact of severe mental illness on violent crime. American Journal of Psychiatry, 163(8), 1397–1403.
9. Fonken, L.K., Xu, X., Weil, Z.M., Chen, G., Sun, Q., Rajagopalan, S., Nelson, R.J., (2011). Air pollution impairs cognition, provokes depressive-like behaviors and alters
10. Gendreau, Little,&Goggin,(1996). A Meta-Analysis of the Predictors of Adult Offender Recidivism: What Works. Criminology 34(4):575 - 608 · November 1996 *with* 64Reads
11. Griffiths KM[1], Carron-Arthur B, Parsons A, Reid R. (2004). Effectivenessof programs for reducing the stigma associated with mental disorders. A meta-analysis of randomized controlled trials. 13(2):161-75. doi: 10.1002/wps.20129.
12. Heim, C., Binder, E.B., (2012). Current research trends in early life stress and depression: review of human studies on sensitive periods, gene-environment interactions, and epigenetics. Experimental Neurology 233, 102e111.
13. Lederbogen Florian *, Leila Haddad, Andreas Meyer-Lindenberg.(2013) Urban social stress e Risk factor for mental disorders. The case of schizophrenia. Environmental Pollution xxx 1e5
14. Lederbogen F[1], Haddad L, Meyer-Lindenberg(2013). A. Urban social stress--risk factor for mental disorders. The case of schizophrenia.Environ Pollut. 2013 Dec; 183:2-6. doi: 10.1016/j.envpol..05.046. Epub 2013 Jun 19.
15. Leschied,A.,Chiodo,D.,Nowicki,E.,&Rodger,S.(2008).Childhood predictors of adult criminality: A meta-analysis drawn from the prospective longitudina literature. *Canadian Journal of Criminology and CriminalJustice,50*, 435---467.
16. Lovell, D., Gagliardi, G. J., & Peterson, P. D. (2002). Recidivism and use of services among persons with mental illness after release from prison. Psychiatric Services, 53(10), 1290–1296.
17. Lund C, De Silva M, Plagerson S, Cooper S, Chisholm D, Das J, Knapp M, Patel V (2011). Poverty and mental disorders: breaking the cycle in low-income and middle-income countries. Lancet, 378: 1502-14
18. Marie E. Rueve, Randon S. Welton. Violence and Mental Illness. Psychiatry (Edgmont). 2008 May; 5(5): 34–48.

19. Mueser,K.T.,Salyers,M.Pl.,&Mueser,P.R.(2001). A prospective analysis of work in schizophrenia. *Schizophrenia Bulletin,27,*281-296.
20. Mulder E[1], Vermunt J, Brand E, Bullens R, van Marle H. (2012).Recidivism in subgroups of serious juvenile offenders: different profiles, different risks?CrimBehavMent Health. Apr;22 (2):122-35. doi: 10.1002/cbm.1819. Epub 2011 Dec 30.
21. Mullen Paul E.(2006)., Schizophrenia and violence: from correlations to preventive strategies.Advances in Psychiatric Treatment,(4) 239-248; **DOI:** 10.1192/apt.12.4.239
22. Naser,R.L.,&LaVigne,N.G.(2006).Family support in the prisoner reentry process:Expectations and realities. *Journal of Offender Rehabilitation,43*, 93-106.
23. Patel V, Lund C, Hatherill S, et al.(2010). Mental disorders: equity and social determinants. In: Blas E, Sivasankara Kurup A, eds. Equity, social determinants and public health programmes. Geneva: World Health Organization,: 115–34.
24. Robbins, P. C., Monahan, J., & Silver, E. (2003). Mental disorder, violence and gender. Law and Human Behavior, 27(6), 561–571.
25. Rueve, M. E., &Welton, R. S. (2008). Violence and mental illness. *Psychiatry, 5*(5), 34-46
26. Sirotich F. Correlates of Crime and Violence among Persons with Mental Disorder: An Evidence Based Review. Brief Treatment and Crisis Intervention / 8:2 May 2008
27. Skeem, J., & Manchak, S. (2008). Back to the future: From Klockars' model of effective supervision to evidence-based practice in probation. *International Journal of Offender Rehabilitation, 47,* 220-247. doi:10.1080/10509670802134069
28. Stanton B, Baldwin RM, Rachuba L. (1997).A quarter century of violence in the United States: an epidemiologic assessment *Psych Clin N Am.* 20269–282 [PubMed]
29. Stueve, A., & Link, B. G. (1997). Violence and psychiatric disorders: Results from an epidemiological study of young adults in Israel. Psychiatric Quarterly, 68(4), 327–342.
30. Swanson, J. W., Swartz, M. S., Van Dorn, R. A., *et al* (2006) A national study of violent behaviour in persons with schizophrenia. *Archives of General Psychiatry*, **63**, 490–499.
31. Swanson Jeffrey W. PhD, · Marvin S. SwartzMD, · Susan M. Essock, · Fred C. Osher.(2002)The Social–Environmental Context of Violent Behavior in Persons Treated for Severe Mental Illness American Journal of Public Health (AJPH)