Commentary

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Journal of Drug Abuse
2471-853X

2017
Vol. 3 No. 2: 9

DOI: 10.21767/2471-853X.100049

Risks Factors of Violence Among Psychiatric Inpatients: Focusing on Substance Abuse and Environmental Violence

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Abstract

Violence is a common issue in psychiatry and has multiple determiners. Considering psychiatric inpatients, the main factors which appear linked to violence are male gender, diagnosis of schizophrenia, the symptom severity, the history of violence and substance abuse. The comparative importance of these risk factors of violence is to be determined with accuracy in order to better understand the phenomena of violence and to prevent it. Nevertheless, recent meta-analyses showed that the effect sizes of the strongest clinical indicators of aggression are statistically small and didn't explain all the aggressive behaviors. In a previous study, we showed that the violence in the psychotic patient's neighbourhood could represent an important risk factor of inpatient violence and should thus be taken into account.

Keywords: Psychotic disorders; Substance abuse; Violence; In-patient; Neighbourhood

Received: August 26, 2017; **Accepted:** August 28, 2017; **Published:** August 30, 2017

Citation: M Rothärmel, O Guillin (2017) Risks Factors of Violence Among Psychiatric Inpatients: Focusing on Substance Abuse and Environmental Violence. J Drug Abuse. Vol. 3 No. 2:9

Introduction

In psychiatry, inpatient violence is a common and complex reality. It has negative consequences, both on the cures and on the patients and caregiver's safety climates [1]. Regarding the risk of inpatient violence, the studies agree on the importance of clinical factors such as the symptoms intensity which proved to be more relevant than socio-demographic factors such as age, gender or socioeconomic backgrounds [16]. The factors which seem more significantly linked to inpatient violence are the diagnosis of schizophrenia and affective disorder, the low degree of insight, the intensity of the thought disturbances, the delusions or the hallucinations. The previous histories of violence (either committed or subjected to) also appear to be a significant variable associated with violence [1-6,10,16]. Concerning the substance abuse, it is a well-established factor of violence in the severely mentally ill patients [7,18]. However, the nature of the link is complex: it may be mediated by psychiatric symptoms or social factors [18] or associated with male gender [10].

This short commentary aims at reviewing the risk factors of violence among psychiatric patients during their hospitalizations. The link between the different factors is examined in this commentary which focuses on the substance abuse and on an understudied factor: the violence in the patient's neighborhood.

I. Violence of patients in psychiatric wards: A major problem

According to Lozzino et al. almost 1 in 5 patients admitted to acute psychiatric wards in high-income countries commit an act of physical violence during their hospitalizations [10]. There is a high heterogeneity between the wards. The highest rates of violence are found in wards with a majority of males, involuntary patients, patients with schizophrenia and patients with alcohol use disorders. In these cases, and when the authors consider all sorts of aggressively, 60 to 75% of the patients could have an aggressive behavior during their cures [17,21].

II. Risk factors of violence among psychiatric inpatients

Male gender

This risk factor could be less important when we consider

inpatient violence in comparison with the violence in the community [3,6]. This factor could be linked to the patient violence through the severity of the psychotic symptoms or the presence of abuse of substances [10,18]. Nevertheless, male gender is associated with more numerous and severe physical attacks [8,10].

Diagnosis

At least twenty studies have reported a positive association between schizophrenia and violence [7]. The other diagnoses significantly linked to inpatient violence are bipolar disorder [2,13] mental disorder with organic cause [11] and personality disorder (antisocial, borderline) [15]. An early age of disease onset is also a risk factor [13].

Psychopathology

More than the diagnosis, authors suggest that certain aspects of the positive psychotic symptomatology such as thought disturbances, delusions and hallucinations and poor control of impulses are moderate factors of risks of violence [12,16,20].

A poor insight and no adherence with treatment are to be moderately associated with inpatient violence; with respectively an odd-ratio of 2.8 and 1.7 in the meta-analysis of Witt et al. [20].

Involuntary admission

Several authors find an association between involuntary admission and inpatient violence [6]. It could be explained by the fact that in many countries, auto and hetero-aggressively are required for involuntary admission.

Length of hospitalization

Concerning this factor, the association with violence is inconstant [10,15]. It is a risk factor at an individual level (violence is a reason for a longer admission) but not at an aggregate level (there is more violence in days immediately after admission in acute admission wards [12].

History of violence

It is the strength predictor of violence among the psychiatric inpatients [20] and the so when associated with male gender [10]. We both considered the violence suffered [5] or committed by the patients [20].

Substance abuse

There is a well-established association between substance use and violence in the severely mentally ill patients, although the nature of the relationship is complex [7,10]. Substance use increases the risk of violence but this may be mediated by increasing the psychotic symptoms, the impulsiveness or by the link with male gender or with low socioeconomic level.

In psychiatric wards, substance abuse could be a contributing factor of violence in only 2% of the cases [2,10]. But the evaluation of substance abuse is a problem in the studies. Few proceeded to a systematic screening by urine test or blood sample [19]. This diagnosis could be underestimated. Furthermore, there could be a difference between alcohol abuse and drug abuse. A history of alcohol is associated with a major risk of violence [20,10] whereas drug abuse is linked to a moderate risk or to no risk [4].

III. Data of meta-analyses

The data of the recent meta-analyses analyses bring further clarification concerning the comparative importance of the risk factors of inpatient violence.

History of violence is the strongest predictor of risk [10,20]. Substance abuse, male gender, positive psychotic symptoms and psychopathology domains as poor insight remain risk factors of violence but their effects are moderate [6]. In particular, the substance misuse is moderately associated with inpatient violence [2,20].

When we consider severe violence, these associations do not change [20].

In their meta-analysis, Lozzino et al. mention that modifiable factors in the wards themselves may play an important part in determining rates of inpatient violence [10]. These factors are various: ward size and spaciousness, levels of surveillance of the staff, professional experiences of the nurses, preventive strategies used. It raises the question of the effect of the environment in the psychiatric patient's aggressive behaviours.

IV. An under-analyzed factor: The violence in the patients' neighborhood

In a previous study [14], we have assessed the psychotic inpatient's violence in association with the violence of the neighborhood from which the patients were drawn. The aim of this prospective multicentre study was to estimate the impact of this environmental factor as regards the other factors of risk of violence in the psychotic's aggressive behaviours.

From June 2010 to May 2011, 95 psychotic inpatients have been included. All the patients were involuntary hospitalized. There was a majority of men (74.7%), with a diagnosis of schizophrenia (42.1%) and a history of violence (30.9%). Thirty-five percent of the patients have abused of alcohol or other substances in the 12 months before the hospitalization. In a bivariate analysis, we found the factors known to be associated with inpatient violence (male gender, the patients' violence history, substance abuse, manic or mixed disorder, the symptoms severity measured by the Brief Psychiatric Rating Scale, the insight degree) and the city crime rate. In a multivariate analysis, the only significant factors associated with the patient's violence were substance abuse ($p<0.02$), the symptoms severity ($p<0.02$) and the crime rates from the different patients' cities ($p<0.0009$).

The known factors associated with inpatient violence as male gender and past history of violence were not found to be associated with the violence in our multivariate analysis. This statement is in accordance with the fact that these factors are risk factors for higher severity of psychosis, substance abuse or violence in the neighborhood. Concerning the substance misuse, we didn't find a relationship between alcohol abuse and inpatient violence as Lozzino et al. [10] or Bowers et al. [4]. It is certainly due to a lack of power of this study. Similarly, we were

not able to distinguish the various histories of violence, between the judicial condemnations and the involuntary hospitalizations. Furthermore, this study could have taken childhood trauma into account [5].

The fact that the violence of the patients suffering from psychosis might be linked to the degree of violence of the patient's neighborhood had already been suggested [9]. However, the meta-analysis used in order to show this link can neither examine co-variation between risk factors nor the extent to which a combination of factors increases the risk of violence. The multivariate analysis allows us to suggest that the violence committed by psychotic patients is partly due to some aspects of the illness (substance abuse disorder and the severity of the psychopathology) but it is also due to the violence in the areas from which the patients are drawn.

Conclusion

Understanding the factors associated with inpatient violence are an important part of devising strategies to protect patients and staff from violent acts. When we consider the violence in the patient's environments, it is a strength predictor of aggressive behavior such as substance abuse or intensity of the symptomatology. These data could be taken into account so as to organize the cures inside the wards. Besides, it could be relevant to separate the patients in acute phases from the other patients and particularly when admitted, by generalizing the units of psychiatric intensive care.

Acknowledgement

We acknowledge Ms Charlotte Le Goadec for her readings.

References

1 Abderhalden C, Needman I, Dassen T, Halfens R, Fischer JE, et al. (2007) Frequency and severity of aggressive incidents in acute psychiatric wards in Switzerland. Clin Pract Epidemiol Ment Health 3: 30.

2 Barlow K, Grenyer B, Ilkiw-Lavalle O (2000) Prevalence and precipitants of aggression in psychiatric inpatients units. Aust N Z J Psychiatry 34: 967-974.

3 Binder RL, Mc Niel DE (1990) The relationship of gender to violent behavior in acutely disturbed psychiatric patients. J Clin Psychiatry 51: 110-114.

4 Bowers L, Allan T, Simpson A, Jones J, Van Der Merwe M, et al. (2009) Identifying key factors associated with aggression on acute inpatient psychiatric wards. Issues Ment Health Nurs 30: 260-271.

5 Bruce M, Laporte D (2015) Childhood trauma, antisocial personality typologies and recent violent acts among inpatient males with severe mental illness: exploring an explanatory pathway. Schizophr Res 162: 285-290.

6 Dack C, Ross J, Papadopoulos C, Stewart D, Bowers L (2013) A review and meta-analysis of the patient factors associated with psychiatric in-patient aggression. Acta Psychiatr Scand 127: 255-268.

7 Fazel S, Gulati G, Linsell L, Geddes JR, Grann M (2009) Schizophrenia and violence: Systematic review and meta-analysis. PloS Med 6: 4.

8 Krakowski M, Czobor P (2004) Gender differences in violent behaviors: Relationship to clinical symptoms and psychosocial factors. Am J Psychiatry 161: 459-465.

9 Large M, Smith G, Nielsse O (2009) The relationship between the rate of homicide by those with schizophrenia and the overall homicide rate: A systematic review and meta-analysis. Schizophr Res 112: 123-129.

10 Lozzino L, Ferrari C, Large M, Nielssen O, de Girolamo G (2015) Prevalence and risk factors of violence by psychiatric acute inpatients: A systematic review and meta-analysis. PLoS ONE 10: 6

11 Mc Niel DE, Binder RL (1995) Correlates of accuracy in the assessment of psychiatric inpatients' risk of violence. Am J Psychiatry 152: 901-906.

12 Nielssen O, Large MM (2012) Homicide in psychiatric hospitals in Australia and New Zealand. Psychiatr Serv 63: 500-503.

13 Raja M, Azzoni A (2005) Hostility and violence of acute psychiatric inpatients. Clin Pract Epidemiol Ment Health 1: 11.

14 Rothärmel M, Poirier MF, Levacon G, Kazour F, Bleher S et al (2017) Association between the violence in the community and the aggressive behaviors of psychotics during their hospitalizations. Encephale pii: S0013-7006(17)30112-4.

15 Soliman AE, Reza H (2001) Risks factors and correlates of violence among acutely ill adult psychiatric inpatients. Psychiatr Serv 52: 75-80.

16 Steinert T (2002) Prediction of inpatient violence. Acta Psychiatr Scand 106: 133-141.

17 Steinert T, Wiebe C, Gebhardt RP (1999) Aggressive behavior against self and others among first-admission patients with schizophrenia. Psychiatr Serv 50: 85-90.

18 Swanson JW, Swartz MS, Van Dorn RA, Elbogen EB, Wagner HR et al. (2006) A national study of violent behaviour in persons with schizophrenia. Arch Gen Psychiatry 63: 490-499.

19 Vaaler AE, Iversen VC, Morken G, Flovig, JC, Palmstierna T, et al. (2011) Short-term prediction of threatening and violent behaviour in an acute psychiatric intensive care unit based on patient and environment characteristics. BMC Psychiatry 11: 44.

20 Witt K, Van Dorn R, Fazel S (2013) Risk factors for violence in psychosis: Systematic review and meta-regression analysis of 110 studies. PLoS ONE 8:2.

21 Yesavage JA (1983) Inpatient violence and the schizophrenic patient. Acta Psychiatrica Scandinavia M67: 353-357.