Impact on the psychotic vulnerability of the therapeutic approach in the Prison Psychiatric Hospital in Seville (Spain)

P Massé-García, FJ Lamas-Bosque and A Massé-Palomo

Seville Prison Psychiatric Hospital

ABSTRACT

Objectives: to analyze changes in psychotic vulnerability following the implementation of a program of prison psychiatric treatment, recidivism after the release and various descriptive variables of criminological interest.

Materials and methods: review of a sample consisting of 50 patients diagnosed with schizophrenia admitted to the Prison Psychiatric Hospital of Seville.

Results: there was a statistically significant reduction of psychotic vulnerability according to an assessment using the Frankfurt psychopathological inventory (FBF-3), after conducting a complete psychiatric, psychological, social and rehabilitation approach in the prison environment. The core symptoms relating to complex perception and language also decreased significantly. The reduction is particularly noticeable in the number of patients categorized as medium-high and high severity.

Recidivism in the follow-up of release of patients in the study sample is low (6%) and there were no cases of serious felony or grievous bodily harm. Recidivism, when it occurs, is not immediate.

Although there is some criminal versatility, it is limited. The most frequent victims are parents with a previous relationship with the patient. Most of the patients in the sample, and all recidivists, have comorbid substance abuse (dual diagnosis).

Discussion: we need more comprehensive studies to establish causal relationships between the decrease in psychotic vulnerability and an integrated psychiatric, psychological, social and rehabilitation approach in prisons; or to attribute the low rate of recidivism to the decline of psychotic vulnerability.

Keywords: Schizophrenia; Forensic Psychiatry; Criminology; Violence; Mental Competency; Psychotic Disorders; Compensation and Redress; Crime Victims.

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INTRODUCTION

Society tends to perpetuate certain stereotypes regarding people with severe mental disorders such as schizophrenia, leading to believe that psychopathological compensation or even improvement are not possible or rather that if achieved, it is not stable over time. Likewise, the belief that correctional facilities are not intended to help the individual and that the person who has ever presented a certain criminal behavior at some point will necessarily repeat that behavior is common. We believe that this study mainly focuses on the environment of schizophrenic patients judicially subject to security measures due to criminal activity and put this therapeutic skepticism to the test. One of the theories supporting the hypothesis of punitivity is based on feelings of insecurity [1]. We hope that more reality-based information regarding the risk of persistent offence in schizophrenic patients will help vary the feelings of insecurity of society and thus adjust correctional measures to the specific needs of this population.

The analysis of certain disorders that could be related to criminality represents a relevant field of study for criminologists [2]. According to recognized authors [3], neither all schizophrenic patients present a higher

risk of developing certain behaviors nor is there an agreement regarding the incidence of violent behavior among schizophrenic patients. Other authors [4], consider that psychotic patients are not especially dangerous although at the beginning of their disease and mostly when they have not received any treatment yet, aggressiveness can be more predominant. Moreover, the existence of delirious ideas, mainly detrimental and persecutory delusions, can lead to violent attitudes or activities against people as serious as homicide [5].

As far as psychopathological elements more strongly associated to violent behaviors are concerned, we will follow Derek Chiswik [6], who has carried out a thorough and accurate revision. Some authors[7], have pointed out that delusions with a higher probability of leading towards violent behaviors are those which entail fear, outrage, jealousy, damage or threats towards a close relative. Nevertheless, others[8] deduced from their study that delusions leading to the inhibition of action apparently reduce the potential of violent acts. As far as hallucinations are concerned, Zisook et al [9] found that patients with command hallucinations were not more prone to violence than control patients. In a 1990 sample[10] of patients, they reported that the content of command hallucinations was more violent than in other types of hallucinations and almost half of the sample reported having acted under their influence in complete obedience.

MATERIAL AND METHODS

The sample included 50 patients diagnosed with schizophrenia hosted as judicial inmates after having been held non-accountable due to their psychiatric condition. These patients were monitored upon release for a period not under one year and not exceeding six years. Patients were randomly selected.

Between 2009 and 2013 these patients were subject to Frankfurt Psychopathological Inventory (FBF-3) before and after undergoing psychiatric, psychological, and social and rehabilitation treatment as part of the standard clinical assessment of the therapeutic procedure of that Prison Psychiatric Hospital. Süllwold and Huber's 1986 Frankfurt Psychopathological Inventory [11] (FBF-3) is one of the most widely used instruments to assess basic symptoms. Basic symptoms provide evidence and a measure of the vulnerability, both pre- and post-psychotic, and reveal the trans-phenomenal substrate leading to typical symptoms in psychotic breaks.

In order to verify the potential re-offence of released patients the Corrections Information System (SIP in Spanish) was consulted. Statistical analysis was carried out by means of Statistical Package for the Social Sciences (SPSS). Several variables of criminological interest are analyzed.

RESULTS

As far as the effectiveness of a comprehensive approach (including psychiatric, psychological, social and rehabilitation treatment) in the correctional environment is concerned, measured by means of FBF-3, we were based on the assumption that post-test results would be inferior to pre-test results, since schizophrenic patients in our sample should have reduced psychotic vulnerability rates. In fact, there is a difference in FBF-3 scores before the therapeutic approach in the Prison Psychiatric Hospital (38.4) and after (33.22). These are statistically significant differences since bilateral significance in Student's T test for two related samples is under 0.05 (0.033).

Moreover, we have compared average scores in FBF-3 before the therapeutic approach in the Prison Psychiatric Hospital regarding different sub-scales (loss of control, simple perception or sensory instability, complex perception, language, cognition and thinking, memory, motility, loss of automatism, distress and anhedonia, irritability due to overstimulation). There are significant differences ($p<0.05$) between complex perception basic symptoms (average scores of 63.79 before therapeutic approach and 58.81 after) and language (average scores of 61.32 before therapeutic approach, and 55.18 after).

We have made categories for the severity of the degree of vulnerability: lack of it, questionable, low-moderate, moderate-high, high or very high, as depicted in Figure 1, according to the vulnerability measured by means of FBF-3 before the intervention and in Figure 2, after the therapeutic intervention. The most relevant finding was the reduction of patients with moderate-high severity levels (26% before treatment, 16% after) and high levels (20% before treatment, 16% after).

Out of the 50-individuals sample, diagnosed with schizophrenia and hosted in the Prison Psychiatric Hospital who were monitored for a period of time ranged between one and six years, only 3 (6%) re-offended in some way that entailed their imprisonment. 47 (94%) did not.

Patients who reoffended also presented a slight reduction (yet lower) of the average scores of FBF-3 before therapeutic approach (37.33) and after (36.33).

Nevertheless, since this is a reduced sample we cannot use tests that would allow us determine their statistical significance.

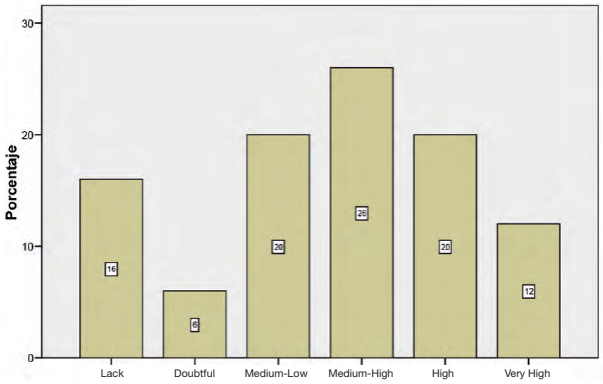

Figure 1. Psychotic vulnerability prior to intervention within correctional context.

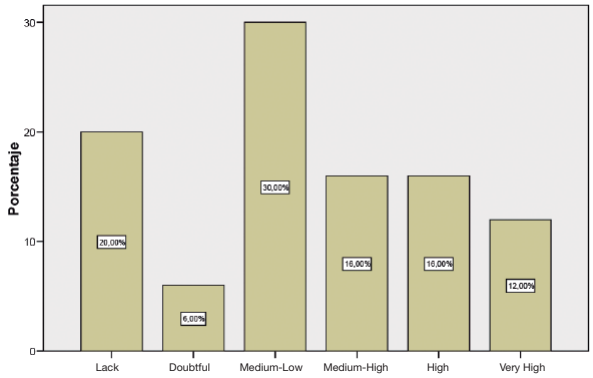

Figure 2. Psychotic vulnerability after intervention within correctional context.

Two of the three reoffending patients (66.6%) were hosted in ordinary correctional facilities subject to deprivation of liberty measures (detention centers Puerto III and Seville II) and the other (33.33%) was admitted to a Prison Psychiatric Hospital under security measures. The average duration between their release and the date of the re-offence was 539.67 days (ranged between 250 days and 732 days; standard deviation of 255.31). The crimes they were accused of were: the offence of making threats in one case (33.33%), breaking a sentence in another (33.33%) and breaching of precautionary measures in the last one (33.33%). The maximum duration of deprivation of liberty ranged between 6 and 35 months (mean of 19.10 months, standard deviation 14.70). According to the Criminal Code in force less severe sentences are those whose duration ranges between three months and five years. Therefore all of the aforementioned are included in this category. As you can see, in none of the cases was there direct physical damage against third parties. All of the re-offenders (100%) had a record of drug use.

76% of the patients included in the sample, in addition to the diagnosis of schizophrenia, used drugs; only 24% did not.

There is certain diversity regarding the crimes committed by patients with schizophrenia in our sample, as depicted in Table 1, the most common being offences involving bodily harm (24%); mistreatment (18%); murder and manslaughter both consummated and attempted (20% altogether); and threats (16%). Although it may seem as a limited diversity, we must take into account the lack of a relevant number of criminal acts among the patients of the sample. As far as the criminal acts most frequently committed by schizophrenic patients in our sample, we must highlight crimes against persons (38%); family-based mistreatment (24%); and offences against personal freedom mainly breaching of removal measures (16%). These are depicted in Table 2.

As far as the relationship with victims is concerned, the sample is equally categorized between those who had a previous relationship with the victim (50%) and those who did not (50%). Among those who did, parents of the patient are the most common victims (38% of the sample). This is depicted in Table 3.

An important study factor is the destination of the 50 schizophrenic patients in our sample upon release, as depicted in Table 4. 48% were released with the guardianship of some relative. 50% were released with institutional guardianship after the implementation of a search for resources protocol of the Community Mental Health Services. One of the patients (2%), considered sufficiently autonomous, was released without neither family-based nor institutional guardianship.

DISCUSSION

There is a significant difference in FBF-3 scores before the therapeutic approach at the Prison Psychiatric Hospital (38.4) and after (33.22). There is also a significant reduction of the severity of psychotic vulnerability: the high and moderate-high severity categories are replaced by moderate-low severity categories. These results may be due to the effectiveness of a comprehensive approach including psychiatric, psychological, social and rehabilitation treatment within the correctional environment although we should also take into consideration other confounders such as the

Table 1. Crime leading to imprisonment.

		Incidence	Percentage
Valid	Murder	2	4,0
	Attempted murder	3	6,0
	Homicide	2	4,0
	Attempted homicide	2	4,0
	Injuries	12	24,0
	Threats	8	16,0
	Theft	2	4,0
	Breach of security measure	1	2,0
	Habitual maltreatment	10	20,0
	Attack	4	8,0
	Domestic violence	2	4,0
	robbery	1	2,0
	Sexual assault	1	2,0
	Total	50	100,0

Table 2. Types of crimes.

		Incidence	Percentage
Valid	Against people	19	38,0
	Against property	3	6,0
	Sexual offences	1	2,0
	Partner violence	2	4,0
	Domestic abuse	12	24,0
	Against the security of the State	5	10,0
	Against liberty	8	16,0
	Total	50	100,0

Table 3. Relationship with victim.

		Incidence	Percentage
Valid	none	25	50,0
	parents	19	38,0
	partner	5	10,0
	sibling	1	2,0
	Total	50	100,0

Table 4. Family-based or institutional guardianship upon release.

		Incidence	Percentage
Valid	Released with Relatives	24	48,0
	Resource Search Protocol	25	50,0
	Released with no Family Support	1	2,0
	Total	50	100,0

fact that the results could be due to the normalizing effect that the deprivation of liberty lifestyle entails, which could be beneficial for schizophrenic patients, as supported by the theory of social control [12].

There are significant differences ($p<0.05$) regarding the basic symptom of complex perception, the average score being 63.70 before the therapeutic approach, and 58.81 after. As for the subcategories of complex perception, FBF-3 gathers "preproductive" symptoms mainly consisting of distortion of percepts, interpretation uncertainties or slowing, difficulty or ambivalence regarding the judgment of the general scene or fragments of the later [13]. We understand that the reduction in this aspect of psychotic vulnerability can be particularly relevant in the reduction of re-offence, since the cause of many crimes committed by schizophrenic patients lies in self-referential interpretation of neutral situations, to which patients can react violently especially when there is a sense that their control against the threat is invalidated, as defended by Stueve [14]. In fact, the legal basis of unimputability lies in the lack of ability to understand or direct your actions according to your understanding.

There are also significant differences ($p<0.05$) in the language sub-category, average scores dropping from 61.32 before treatment to 55.18 after it. FBF-3 includes subjective difficulties regarding listening or reading comprehension, as well as difficulties for verbal expression. These are also related to social isolation suffered by psychotic patients, and the corresponding decreased tolerance to the company of other people and even of "expressed emotion", as their authors suggest (Süllwold and Huber, 1986). Therefore, improved scores in the language sub-category can entail a reduced tendency towards isolation and tolerating the company of other people. This can improve the schizophrenic patient's social support network and therefore reduce the possibilities of re-offence, thus contributing as a protector as suggested by Farrington [15].

We have to highlight one of the most relevant results of this study. The fact that re-offence upon release of schizophrenic patients can be considered extremely low, 6% in comparison to 94% of patients who do not re-offend. This contrasts certain degree of skepticism regarding psychiatric treatment in general, or the aspects of reinsertion and rehabilitation developed within security measures in the correctional environment, since people tend to believe that re-offence is the rule among patients with severe mental disorders upon release. As these results show, re-offence is the exception.

Among re-offending patients, the reduction of average scores in FBF-3 before treatment (37.33) and after (36.33) is lower (1 point) than that of non-reoffenders (5.18 points). Before drawing conclusions regarding the predictive ability of FBF-3 scores before and after the implementation of correctional biosocial and rehabilitation programs regarding the potential of re-offence we must consider the fortunately small size of the re-offending sample. To assess this, further studies with a lager sample would be needed, including at least 500 patients.

In line with this, results also show that in this limited percentage of re-offenders, the crime has not been committed immediately upon release, but around a year and a half (539 days) after their release. We must therefore consider that correctional and psychiatric measures are also effective to a certain extent.

From the fact that two thirds of re-offending patients have been submitted to deprivation of liberty measures by prosecution authorities instead of security measures (it has been considered that when the new crimes have been committed there was no relevant impairment of their intellectual abilities entailing an impaired comprehension or direction of their actions according to that comprehension) we can deduce that the variables with a stronger effect in re-offence are not directly related with the decompensation of their schizophrenic disorder, and we should take into account other aspects. A very important factor is the use of drugs, a common denominator in all re-offending patients (100%), and a frequent factor among the whole sample -76% of whom used drugs. There is a long tradition in criminology of establishing correlations between the use of drugs and the probability of committing a crime. Some authors [16] have quantified this around 2.8 and 3.8 times higher. Although in the Prison Psychiatric Hospital important efforts towards the approach of drug use are made along with community centers, if we carry out a critical interpretation of these results we should consider reinforcing this aspect of psychiatric and correctional treatment.

Probably the effort made by multidisciplinary teams in improving continuous care and involving patients who will be supervised (family-based or institutional guardianship) upon release is a key element which explains the low rates of re-offence. We agree with the reflections of Professor Ferdinand[17] regarding the fact that the majority of offenders have few alternatives after a program of criminal justice, taking into account that liberty assistance programs assess the quality of treatment programs during the deprivation of liberty.

CONCLUSIONS

In this study with a sample of 50 patients diagnosed with schizophrenia admitted to the Prison Psychiatric Hospital of Seville, there is a statistically significant reduction of psychotic vulnerability, as evaluated by Frankfurt's Psychopathological Inventory (FBF-3) after the implementation of a comprehensive psychiatric, psychological, social and rehabilitation therapeutic approach. Basic symptoms regarding complex perception and language are also significantly reduced. The reduction is particularly relevant regarding the number of patients under the category of high and moderate-high severity.

Re-offence upon release of the patients included in the sample is low (6%), delayed (539 mean days), and in any case for severe crimes entailing physical damage.

Although there is a certain degree of criminal diversity, it is limited. Victims most frequently have some kind of relationship with the patients, mostly parents. The vast majority of the patients in the sample and all re-offenders use substances (dual pathology).

Further larger and methodologically complex studies are needed to establish solid cause-effect relationships between the reduction of psychotic vulnerability and a comprehensive approach including psychiatric, psychological, and social and prison-regime aspects; or to establish that the low re-offence rate is due to the reduction of psychotic vulnerability.

CORRESPONDENCE

Pedro Massé-García.
Hospital Psiquiátrico Penitenciario de Sevilla (Spain)
e-mail: pedromasse@gmail.com

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