

# Are there more mechanical restraint in patients admitted for Substance Use Disorder?

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## Introduction and objectives

Mechanical restraint is a therapeutic procedure commonly applied in acute units in response to psychomotor agitation. Its frequency is between 21 and 59% of patients admitted. These patients represent a risk to both themselves and for health workers (Lorenzo et al. 2014; Rubio-Valera et al. 2015). There is a myth that patients with substance use disorder (SUD) are more aggressive and require more forceful measures. There are not clinical studies that compared if there are differences of the frequency of mechanical restraint in patients with SUD.

The aim of this study is to explore the differences of frequency of mechanical restraint on patients with SUD in the psychiatry acute and dual pathology units in and other psychiatric diagnostics.

## Material and methods

We reviewed retrospectively the informatics record of all the mechanical restraints made and the total discharges of the three acute care units and dual disorders of Neuropsychiatry and Addictions Institute (INAD) of the Parc de Salut Mar de Barcelona, between January 2012 and January 2015. For every discharge the presence of at least one mechanical restraint and the DSM IV diagnostic were coded. Then was calculated the frequency and proportion of mechanical restraints in every diagnostic group.

## Results

The number of discharges analyzed was 4659 from which 838 had an episode of mechanical restraint associated. The 37% of patients with SUD of cocaine had an episode of mechanical restraint. The patients with SUD of alcohol only the 11%, and 18% patients with SUD of Cannabis. Respect the most frequent pathology the 30% of patients with schizophrenia and 28% of Bipolar disorder had an episode of mechanical restraint.

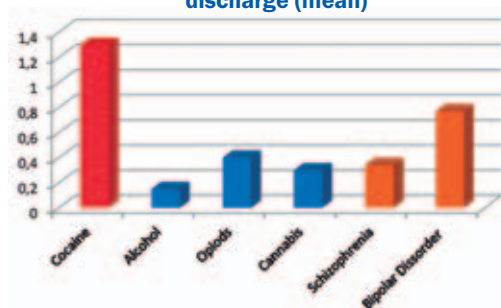
Table 1. Sociodemographic Characteristics

	Gender		Age	
	Males	Females	Mean	Estándar Desviation
ALCOHOL	73%	23%	40,92	12,14
OPIOIDS	80%	20%	43,4	9,42
CANNABIS	70%	30%	32,8	9,56
COCAINE	70%	30%	34,7	6,27
TOTAL	71%	29%	37,06	10,41

Graphic 1. Proportion of patients with mechanically restrain for each pathology



Graphic 2: Number of mechanical restrain for discharge (mean)



## Conclusions

The patients with diagnostics of intoxication or abuse of cocaine are those with a higher ratio of mechanical restraints for diagnosis. With respect of the frequency of mechanical restraint for patients, a patient admitted with abuse or cocaine intoxication have more risk to have a second restraint during the hospitalization.

## Bibliography

- Lorenzo, R. Di et al., 2014. Clinical and Organizational Factors Related to the Reduction of Mechanical Restraint Application in an Acute Ward?: An 8-Year Retrospective Analysis. pp.94–102.
- Rubio-Valera, M. et al., 2015. Health service use and costs associated with aggressiveness or agitation and containment in adult psychiatric care: a systematic review of the evidence. BMC Psychiatry, 15(1). Available at: <http://www.biomedcentral.com/1471-244X/15/35>.

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