# FROM METHAMPHETAMINE INDUCED PSYCHOSIS TO SCHIZOPHRENIA: A STUDY OF DIAGNOSTIC STABILITY IN A DUAL DIAGNOSIS UNIT

RB. Sauras Quetcuti[1], G. Mateu-Codina[1], AM. Coratu[1], D. García-Fuentes[1], A. Garcia-Guix[1], M. Robles[1], L. Oviedo[1], C. Castillo[1], M. Torrens[1,2], MF. Fonseca[1,2]

[1]INAD Institute of Neuropsychiatry and Addictions, Hospital del Mar, Barcelona

[2]IMIM (Hospital del Mar Medical Research Institute)

## Introduction

Psychotic symptoms are frequently experienced among individuals who use methamphetamine. The prevalence of methamphetamine induced psychosis has increased in several countries around the world where methamphetamine use has also increased. Methamphetamine induced psychosis remains difficult to distinguish from primary psychosis, especially in that subset of individuals in which psychosis can recur and persist for more than one month. Some studies found that after a follow up period nearly 40% of patients are diagnosed with schizophrenia due to persistent psychosis. Some groups use the term of methamphetamine persistent psychosis in cases of long-term psychosis with onset in the context of methamphetamine use. The aim of the present study is to evaluate the long-term stability of the methamphetamine induced psychosis diagnosis.

## Methods

We reviewed the medical records of patients with methamphetamine induced psychosis who had been admitted and readmitted in a Dual Diagnosis Unit in Barcelona from 2016 to 2022.

## Results

A total of 78 patients were admitted for the first time with the diagnosis of methamphetamine induced psychosis from 2016 and 2022. Sixteen patients were excluded because they had a previous diagnosis of primary psychosis. Of the remaining 62 patients, 34 maintained the diagnosis of methamphetamine induced psychosis (54.8%), 22 were diagnosed of no specified psychosis (35.5%) and 6 were diagnosed of primary psychosis (9.6%; schizophrenia: 1, bipolar disorder: 1 and delusional disorder: 1) (Figure 1). Patients who develop primary psychosis had a higher rate of family history of psychiatric disorders, and a higher rate of readmissions. Patients who remain with the methamphetamine induced psychosis diagnosis required shorter hospitalizations (Table 1).

## Conclusions

In our sample 45.1% of patients who had been admitted by methamphetamine induced psychosis changed the diagnosis after a follow up period. The more frequent diagnosis given was no specified psychosis. Probably this term corresponds to the methamphetamine persistent psychosis described by other groups. Symptoms were indistinguishable from schizophrenia but with onset in the context of methamphetamine. Our rate of diagnosis stability is a little bit lower than previous studies, probably because our sample only includes in-patients sample. A high proportion of patients would develop persistent psychosis after a first episode methamphetamine induced psychosis. Integrated treatment and preventive treatment of methamphetamine addiction is recommended.

Figura 1

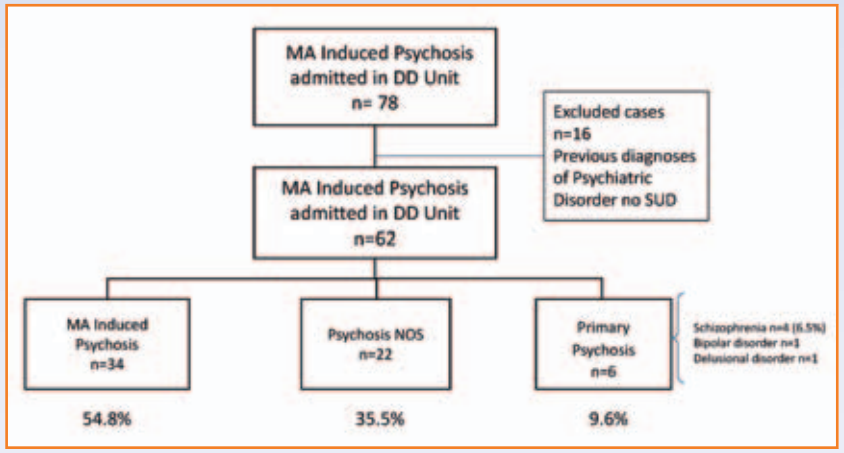


Table 1

| | Induced Psychosis n=34 | Psychosis NOS n=22 | Primary Psychosis n=6 | Statistics | p |
|---|---|---|---|---|---|
| **Sex (M%)** | 27(79.4) | 19(86.4) | 4(66.7) | 1.245 | 0.537 |
| **Age** | 36.8(9.8) | 34.9(10.2) | 29.5(5.8) | 1.528 | 0.225 |
| **Duration of addiction (years)** | 6.3(5.6) | 7.83(9.5) | 7.8(7.0) | 1.107 | 0.339 |
| **Family history (%)** | 1 (3.2) | 2(10) | 4(66) | 19.7 | 0.001* |
| **Other SUD** | 86.5% | 81.4% | 100% | 8.6 | 0.567 |
| **Medical comorbility (%)** | 20(58.8) | 9(40.9) | 1(16.7) | 4.393 | 0.111 |
| **Number of admissions** | 1.44(1.3) | 3.45(22) | 7.5(6) | 17.27 | 0.000* |
| **Hospital stay (days)** | 13.1(11.2) | 23.8(45.2) | 26.2(15.8) | 2.2 | 0.113 |

*M: Male; NOS: not otherwise specified; SUD: Substance use disorder* ** p<0.05*

## Bibliography


- Murrie B, Lappin J, Large M, Sara G. (2020). Transition of Substance-Induced, Brief, and Atypical Psychoses to Schizophrenia: A Systematic Review and Meta-analysis. *Schizophr Bull*. Apr 10;46(3):505-516. doi: 10.1093/schbul/sbz102.
- McKetin R, Baker AL, Dawe S, Voce A, Lubman DI. (2017). Differences in the symptom profile of methamphetamine-related psychosis and primary psychotic disorders. *Psychiatry Res*. May;251:349-354. doi: 10.1016/j.psychres.2017.02.028. Epub 2017 Feb 13.
- Jacobs E, Fujii D, Schiffman J, Bello I. (2008). An exploratory analysis of neurocognition in methamphetamine-induced psychotic disorder and paranoid schizophrenia. *Cogn Behav Neurol*. Jun;21(2):98-103. doi: 10.1097/WNN.0b013e31816bdf90.


Founded by Red de Investigación en Atención Primaria de Adicciones (RIAPAd) (RD21/0009/0001), the European Union Next Generation EU, Mecanismo para la Recuperación y la Resiliencia (MRR), y Generalitat de Catalunya (2021SGR-00041)