# Distinctive features of First Episode of Psychosis during the Covid-19 pandemic

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#### Introduction

COVID19 has brought several psychosocial stressors that are having an impact on global mental health. Psychosocial stressors have been consistently associated with the development of both First Episode of Psychosis (FEP) and Brief Psychotic Disorder (BPD). The impact of the pandemic on the incidence of FEP and BPD is not clear. It is not clear whether FEP diagnosed during the early months of the pandemic is associated with certain sociodemographic or vulnerability factors, nor whether there is a unique clinical presentation.

### **Objectives**

To describe the clinical and sociodemographic characteristics of FEP patients diagnosed since the onset of the COVID19 pandemic and compare them with the equivalent period of the previous year.

#### Methods

We included all FEP patients attended at Parc de Salut Mar (Barcelona, Spain) from March 14, 2020 (when the state of emergency in Spain began) to December 31, 2020 with the same period of 2019. We assessed sociodemographic variables, duration of untreated psychosis (DUP), cannabis and alcohol use, psychiatric diagnosis, and psychiatric symptom scales. We performed a univariate analysis between the groups using U-Mann Whitney for continuous variables and Chi-Square for qualitative variables.

Inclusion criteria for this study were: 1) age 14 to 35 years; 2) no prior history of severe neurological medical conditions or severe traumatic brain injury; 3) presumed IQ level > 80; 4) no substance abuse or dependence disorders (except for cannabis or nicotine use); 5) no confirmed or suspected SARS-CoV-2 infection (defined as absence of symptoms and no close contact with a confirmed SARS-COV-2 patient). For hospitalized patients, this criterion was confirmed with a negative polymerase chain reaction (PCR) test.

## Results

A total of 20 FEP patients were diagnosed in each period. No differences were found in sociodemographic variables, scales scores or DUP (Table 1). During COVID19 period there was a smaller proportion of cannabis users (60% vs 90%; p=0.028) and a tendency of lower weekly consumption (14.44 vs 16.42; p=0.096). There were more cases of BPD (25% vs 5%; p=0.077) and less of Affective psychosis (0% vs 25%; 0.017).

Table 1. Sociodemographic and clinical variables of the two groups of FEP patients

	COVID19 pandemic period (14.03.20 - 31.12.20) (n=20)	Equivalent previous period (14.03.19 – 31.12.19) (n=20)	Statistic value (U or $\chi^2$ )	P value
Age	25 (4.97)	24 (3.73)	189.5	0.78
Gender (N, % woman)	9 (45%)	5 (25%)	1.76	0.185
Immigrant (N, % immigrant)	13 (65%)	12 (60%)	0.11	0.74
DUP (M, IQR)	48.31 (9 - 60)	121.37 (15 - 180)	148.5	0.16
Cannabis use (N, %users)	12 (60%)	18 (90%)	4.8	0.028
Cannabis weekly (M, IQR)	14.44 (0 - 24.5)	16.42 (1 - 21)	138.5	0.096
Alcohol use (N, %users)	11 (55%)	13 (65%)	0.42	0.52
Brief psychotic disorder (N, %)	5 (25%)	1 (5%)	3.14	0.077
Affective psychosis (N, %)	0 (0%)	5 (25%)	5.71	0.017
PANSS P score	31 (8)	31 (8)	131.5	0.35
PANSS N score (M, IQR)	13.50 (9.25 - 18.75)	16.32 (10 - 20)	143.5	0.57
PANSS GP score (M, IQR)	38.13 (36.25 - 44)	41.32 (36 - 46)	160	0.98
PANSS T score	75.19 (18.91)	83.37 (23.82)	147.5	0.66
YMRS score (M, IQR)	17.63 (9.25 - 25.75)	17.89 (9 - 26)	142	0.76
CDSS score (M, IQR)	3.31 (3.28)	4.26 (4.74)	144	0.81
GAF score (M, IQR)	34.75 (21.25 - 46.25)	33.84 (25 - 40)	141	0.731

\*All values given as means with SD, unless otherwise

Abbreviations: N = Sample size. IOR = Interquartile range, mL = milliliters, DUP = Duration untreated psychosis, IQR = Interquartile range, n = Sample size, PANSS P = Positive and Negative Syndrome Scale positive. PANSS N = Positive and Negative Syndrome Scale negative. PANSS GP = Positive and Negative Syndrome Scale general pathology, PANSS T = Positive and Negative Syndrome Scale total, YMRS= Young Mania Rating Scale, CDSS = Calgary Depression Scale for Schizophrenia, GAF = Global Assessment of Functioning

#### Conclusions

During the COVID-19 pandemic we did not find an increase of FEP or more severe clinical presentations. However, we identified differences in the type of FEP that could be related to the psychosocial stressors of this time. For example, we observed an increase in the proportion of BPD, what has been described in other samples during the first months of the pandemic<sup>1,2</sup>. The tendency of lower cannabis use was consistent with other studies that have observed a decrease in drug abuse comorbidities in patients with FEP, probably related to the difficulties to obtain illegal drugs during the confinement measures.

This information could help to develop prevention strategies and how to best mitigate the risks of FEP in future crises or events with similar psychosocial stress characteristics.

#### References

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