

Hospitalizations with a primary diagnosis of schizophrenia were selected and schizophrenia subtypes were grouped using the International Classification of Diseases version 9, Clinical Modification (ICD-9-CM) codes of diagnosis 295.xx.

**Results:** There was a total of 25,385 hospitalizations in public hospitals of Portugal between 2008 and 2015 with a primary diagnosis of Schizophrenia or other psychotic disorders. A total of 14,279 patients were hospitalized during the study period with an average of 1.78 hospitalizations episodes per patient in the 8-year interval (0.22 hospitalizations/patient/year). 68.0% of the hospitalizations occurred in male patients and the median length of stay was 18.0 days. Mean hospitalization charges were 3,509.7€ per hospitalization, summed to a total charge of 89.1M€. Throughout the study period there was a significant linear decrease in the number of hospitalizations ( $r = 0.940$ ;  $B = -47.488$ ;  $p = 0.001$ ). The last year of the study (2015) had the lowest number of hospitalizations with a total of 2,958 (vs. 3,314 in 2008). When adjusted for the yearly population, there was also a decrease of the number of hospitalizations per 100,000 inhabitants from 31.39 to 28.56 hospitalizations per 100,000 inhabitants between 2008 and 2015, respectively.

**Conclusions:** We found differences in hospitalization characteristics by gender, age and primary diagnosis.

**Disclosure:** No significant relationships.

**Keywords:** schizophrenia; Big Data; Administrative Database

## O252

### Monitoring of antipsychotic plasma levels in the assessment of poor response and nonadherence to antipsychotics in delusional disorder

A. González-Rodríguez<sup>1\*</sup>, A. Guàrdia<sup>1</sup>, A. Alvarez Pedrero<sup>1</sup>, M. Betriu<sup>1</sup>, J. Cobo<sup>1</sup>, N. Sanz<sup>1</sup>, S. Acebillo<sup>1</sup>, J.A. Monreal<sup>1</sup>, D. Palao Vidal<sup>2,3</sup> and J. Labad<sup>4</sup>

<sup>1</sup>Mental Health, Parc Taulí University Hospital. Autonomous University of Barcelona (UAB). I3PT, Sabadell, Spain; <sup>2</sup>Department Of Mental Health, Parc Taulí University Hospital. Autonomous University of Barcelona (UAB). I3PT. CIBERSAM, Sabadell, Spain; <sup>3</sup>Mental Health, Parc Taulí University Hospital. Autonomous University of Barcelona (UAB). I3PT, CIBERSAM, Sabadell, Spain and <sup>4</sup>Mental Health, Hospital of Mataró. Consorci Sanitari del Maresme. CIBERSAM., Mataró, Spain

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.426

**Introduction:** Over the last decades, antipsychotic plasma levels have been used to evaluate therapeutic response, adherence and safety of antipsychotics in schizophrenia. Their clinical utility in delusional disorder (DD) has been poorly studied.

**Objectives:** To investigate the relationship between plasma concentrations of risperidone (R), 9-OH-risperidone (9-OH-R) and olanzapine (OLZ), and clinical outcomes in DD.

**Methods:** Case-series of inpatients and outpatients with DD receiving treatment with risperidone (n=19) or olanzapine (n=2). Determination of R, 9-OH-R (active metabolite) and OLZ levels were obtained by high-performance liquid chromatography with electrochemical detection. Clinical variables such as treatment response or adverse events were recorded for all patients. These variables were correlated with two plasmatic ratios in patients treated with R: R:9-OH-R concentration ratio and total concentration-to-dose (C: D) ratio, indicating CYP2D6 activity and R elimination respectively.

**Results:** Twenty-one patients were included: inpatients (n=10) and outpatients (n=11). Dose range: R, 1-6 mg/day; OLZ, 5-10 mg/day. Three outpatients (R, n=2; OLZ, n=1) presented antipsychotic levels under the detection limit (non-adherence). All R patients showed CYP2D6 activity (R: 9-OH-R ratio <1). Eight patients presented C: D > 14, indicating a reduction of R elimination, which was associated with poor clinical response (n=3), adverse events (n=3) and no clinical relevance (n=2). OLZ (n=2), no association between levels and clinical outcomes.

**Conclusions:** The determination of antipsychotic plasma levels may be of clinical utility in the assessment of treatment resistance, antipsychotic-adverse events or non-adherence in inpatients or outpatients with DD. Therapeutic drug monitoring should be further studied in future works.

**Disclosure:** AGR has received honoraria, registration for congresses and/or travel costs from Janssen, Lundbeck-Otsuka and Angelini.

**Keywords:** Delusional disorder; Antipsychotic plasma levels; psychosis; Antipsychotics

## O253

### Ethno-psychopharmacological aspects of treatment response in patients with delusional syndrome: A systematic review

A. Guàrdia<sup>1\*</sup>, A. González-Rodríguez<sup>2</sup>, M.V. Seeman<sup>3</sup>, A. Alvarez Pedrero<sup>1</sup>, M. Betriu<sup>1</sup>, J.A. Monreal<sup>1</sup>, D. Palao Vidal<sup>4</sup> and J. Labad<sup>5</sup>

<sup>1</sup>Mental Health, Parc Taulí University Hospital. Autonomous University of Barcelona (UAB). I3PT, Sabadell, Spain; <sup>2</sup>Mental Health, Parc Taulí-University Hospital, Sabadell, Spain; <sup>3</sup>Psychiatry, University of Toronto, Toronto, Canada; <sup>4</sup>Mental Health, Parc Taulí-University Hospital, Sabadell (Barcelona), Spain and <sup>5</sup>Mental Health, Hospital of Mataró. Consorci Sanitari del Maresme. CIBERSAM., Mataró, Spain

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.427

**Introduction:** Treatment response in schizophrenia can be influenced by cultural and ethno-biological factors. However, in delusional disorder (DD), these potential influences have been poorly investigated.

**Objectives:** This review aims to synthesize what is known about the influence that cultural and biological factors may have on treatment response in DD.

**Methods:** A systematic review was performed on PubMed from inception to 2020 in keeping with PRISMA directives. Search terms: [(cultural OR ethnic\* OR ethno\*) AND (treatment OR therap\* OR antipsychotic response) AND (delusional disorder)]. We included all studies whose objective was to explore ethno-psychopharmacological aspects of treatment response in DD.

**Results:** A total of 182 papers were retrieved. Four studies tested ethno-biological factors and 10 reported cultural aspects of treatment response in DD. 1. Cultural hypothesis: 3 studies reported cultural differences in diagnostic practices; in 2 studies, culturally-determined long durations of untreated psychosis (DUP) and comorbidity with mood disorders was associated with response to both antipsychotics (AP) and antidepressants (AD); 3 studies reported that response and AP dose were similar among cultures and that culturally-sensitive psychotherapy improved adherence;

2 studies showed that, where women had poor access to health care, mortality rates were high. 2. Ethno-biological hypothesis: 1 study reviewed moderators and mediators of ethno-specific treatment response; 1 study presented a culture-bound syndrome (Taijin kyofusho) for which AD were found effective; 2 studies in diverse populations found that DD and schizophrenia were both significantly linked to HLA genes.

**Conclusions:** The sociodemographic profile of DD is consistent across various cultures and, when treated appropriately, responds, but in an ethno-culturally-specific manner.

**Disclosure:** No significant relationships.

**Keywords:** Delusional disorder; cultural and ethno-biological factors.; potential influences; treatment response

## O254

### Altered brain functional dynamics in auditory and visual networks in schizophrenia

W.F. You\*, L. Luo, F. Li and Q. Gong

Huaxi Mr Research Center, West China Center of Medical Sciences, Sichuan University, Chengdu City, Sichuan Province, China

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.428

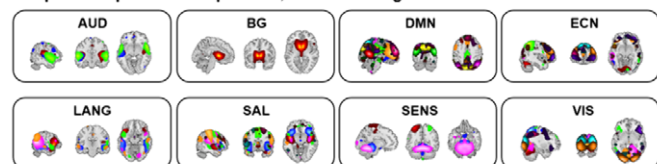
**Introduction:** One of the most perplexing and characteristic symptoms of the schizophrenia (SZ) patients is hallucination. The occurrence of hallucinations to be associated with altered activity in the auditory and visual cortex but is not well understood from the brain functional network dynamics in SZ.

**Objectives:** To explore the brain abnormal basis of hallucinations in SZ with the dynamic functional connectivity (dFC).

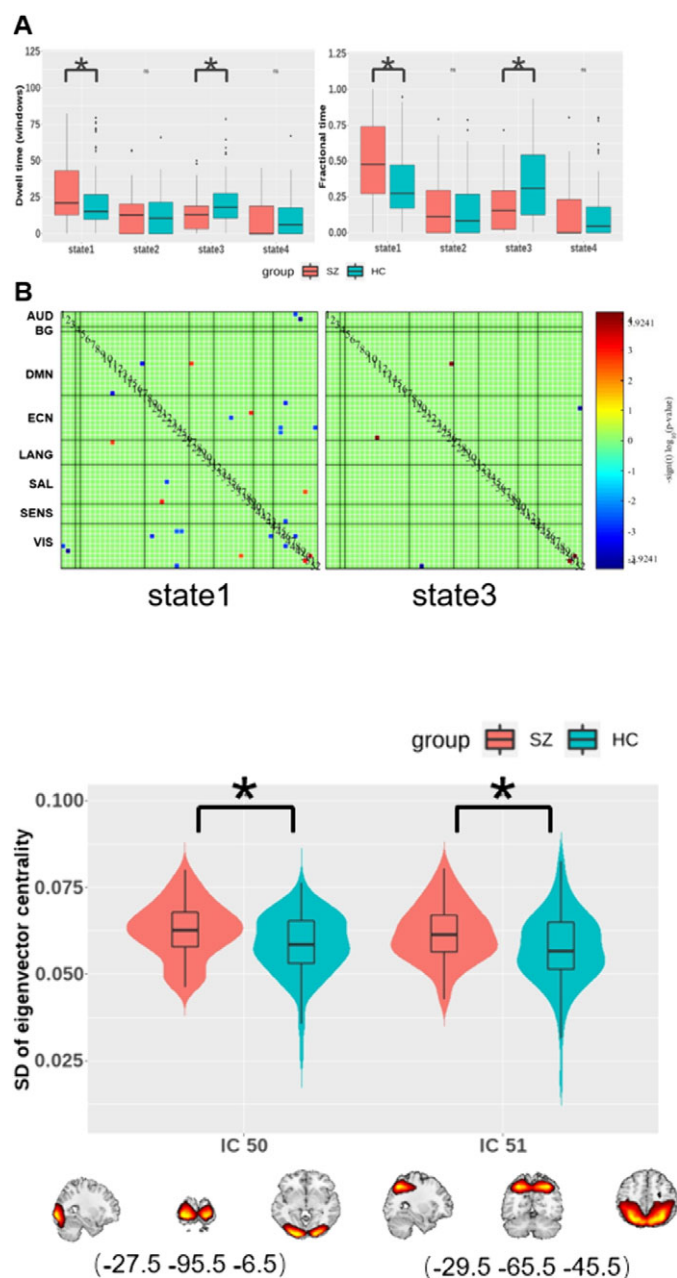
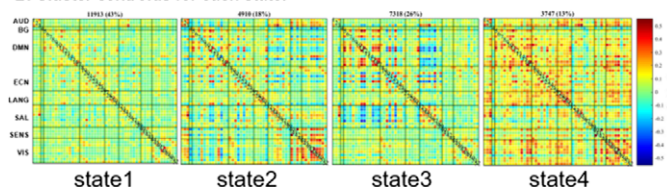
**Methods:** Using magnetic resonance imaging for 83 SZ patients and 83 matched healthy controls and independent component analysis, 52 independent components (ICs) were identified as nodes and assigned into eight intrinsic connectivity networks (Figure 1A). Subsequently, we established dFC matrices and clustered them into four discrete states (Figure 1B) and three state transition metrics were obtained. To further explore the changes in the centrality of each component, eigenvector centrality (EC) was calculated and its time-varying was evaluated.

**Results:** Compared to controls with FDR correction, we found that patients had more mean dwell times and fractional time in state 1 ( $P=0.0081$  and  $P=0.0018$ ), mainly with hypoconnectivity between

#### A. Spatial maps of 52 components, sorted into eight ICNs.



#### B. Cluster centroids for each state.



auditory and visual network and other networks and hyperconnectivity between language and default-mode network (DMN). While, patients had less dwell times and fractional time in state 3 ( $P=0.0018$  and  $P=0.0009$ ), and decreased FC between visual network and executive control network (ECN) and increased FC between ECN and DMN than controls (Figure 2). EC statistics showed that SZs displayed increased temporal dynamics in visual-related regions (Figure 3).

**Conclusions:** SZ was mainly manifested as altered dFC and temporal variability of nodal centrality in auditory and visual networks.

**Disclosure:** No significant relationships.

**Keywords:** hallucination; dynamic functional connectivity; eigenvector centrality; schizophrenia