

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

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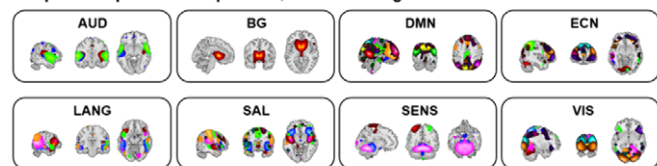
**Introduction:** One of the most perplexing and characteristic symptoms of the schizophrenia (SZ) patients is hallucination. The occurrence of hallucinations to be associated with altered activity in the auditory and visual cortex but is not well understood from the brain functional network dynamics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

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

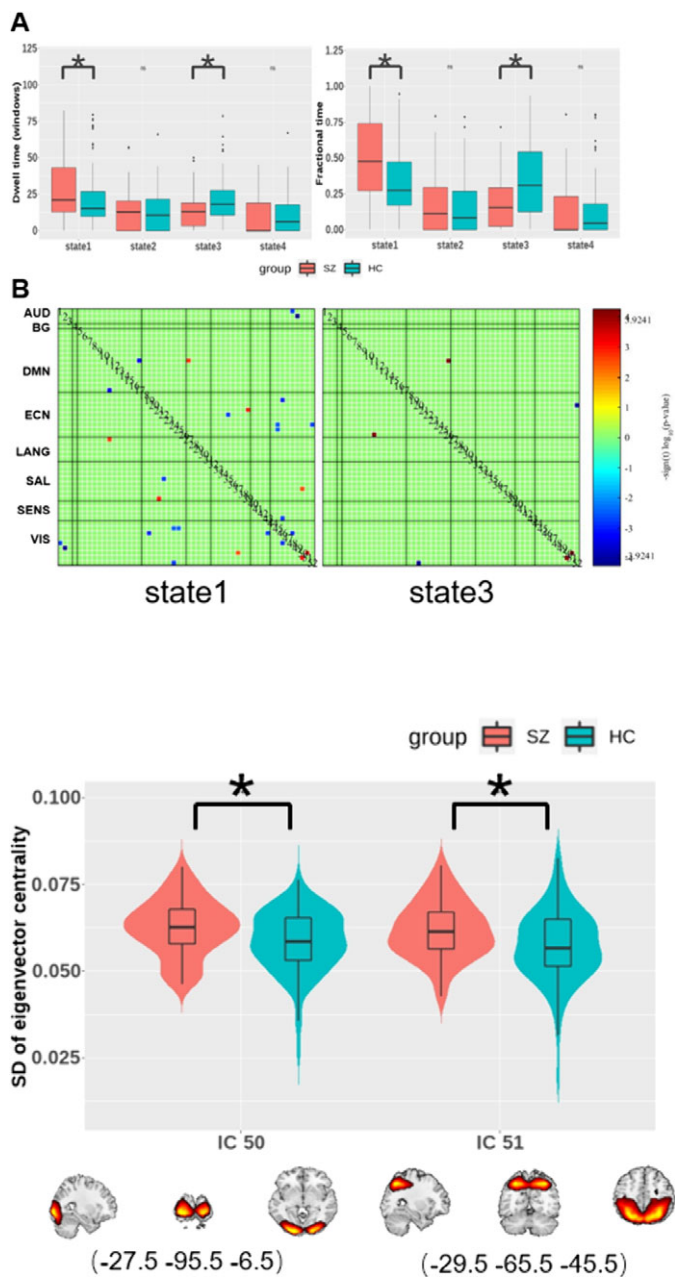
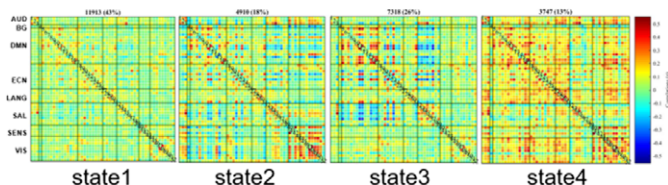
**Methods:** Using magnetic resonance imaging for 83 SZ patients and 83 matched healthy controls and independent component analysis, 52 independent components (ICs) were identified as nodes and assigned into eight intrinsic connectivity networks (Figure 1A). Subsequently, we established dFC matrices 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

## O255

### Cardiological health in patients with schizophrenia. A prospective cohort study

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**Introduction:** Patients with schizophrenia have a four-fold increased all-cause and a doubled cardiovascular mortality rate as compared to the general population.

**Objectives:** The study overall investigates the point-prevalence and prospective changes in cardiovascular risk factors in patients with schizophrenia, with baseline demographics of participants presented here.

**Methods:** A prospective study of patients diagnosed with schizophrenia divided into two subpopulations consisting of newly diagnosed ( $\leq 2$  years from baseline in study (group A)) or chronic (diagnosed  $\geq 10$  years from baseline in study (group B)).

**Results:** A total of 199 patients (57 diagnosed  $\leq 2$  years preceding baseline and 142 diagnosed  $\geq 10$  years ago) were included. Group A had been diagnosed for an average of  $1.13 \pm 0.58$  years and  $21.19 \pm 7.62$  years in group B. The majority ( $n=135$  (67.8%)) were diagnosed with paranoid schizophrenia. At baseline PANSS total (median[Q1;Q3]) for group A was  $61.0[51.0;76.0]$  and  $60.0[48.0;76.0]$  for group B, with PANSS Positive being  $17.0[13.0;20.0]$  and  $15.0[12;19]$ , PANSS Negative being  $16.0[11.0;20.0]$  and  $14.5[10.0;20.0]$ , and PANSS General being  $28.0[22.0;35.0]$  and  $30.0[25.0;37.0]$ , respectively. No difference in Clinical Global Impression was observed between groups ((median[Q1;Q3]:  $4.0[3.0;4.0]$  in both groups). Lastly, global assessment of function was similar between groups ((median[Q1;Q3]: group A symptom:  $38.5[37.0;46.0]$  and group B  $41.0[37.0;52.0]$ , and with function being  $48.0[44.5;53.5]$  in group A and  $45.5[41.0;53.0]$  in group B).

**Conclusions:** Prospective studies investigating prevalence of and prospective changes in cardiovascular risk in patients with schizophrenia are essential to understand the increased all-cause and cardiovascular specific mortality. Demographic descriptions of participants are essential to estimate generalizability in different treatment settings.

**Disclosure:** No significant relationships.

**Keywords:** Cohort; Mortality; Cardiology; schizophrenia

## O256

### Distinct alternations of brain functional network dynamics in obsessive-compulsive disorder and schizophrenia

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**Introduction:** Obsessive-compulsive disorder (OCD) and schizophrenia (SZ) are both severe psychiatric disorders. Though these two disorders have distinct typical symptoms, there are partial polygenic overlap and comorbidity between the two disorders. However, few studies have explored the shared and disorder-specific brain function underlying the neural pathophysiology of the two disorders, especially in the aspect of dynamics.

**Objectives:** To explore the abnormal characteristics of the dynamic functional connectivity (dFC) in OCD and SZ as well as the association between dFC metrics and symptom severity.

**Methods:** The resting state functional magnetic resonance imaging data of 31 patients with OCD, 49 patients with SZ, and 45 healthy controls were analyzed using independent component analysis to obtain independent components (ICs) and assigned them into eight brain networks (Figure 1), then used the sliding-window approach to generate dFC matrices. Using k-means clustering, we obtained three reoccurring dFC states (Figure 2), and state transition metrics were obtained

**Results:** In a sparsely connected state (state 1), SZ showed both increased fractional time and mean dwell time than controls ( $P=0.047$  and  $P=0.033$ ) and OCD ( $P=0.001$  and  $P=0.003$ ). In a state characterized by negative FC between networks (state 2), OCD showed both increased fractional time and mean dwell time than controls ( $P=0.032$  and  $P=0.013$ ) and SZ ( $P=0.005$  and  $P=0.003$ ). Moreover, the fractional time of state 2 was positively correlated with anxiety scores in OCD ( $r=0.535$ ,  $P=0.021$ , FDR corrected) (Figure 3).

