

pathology (CIE-10), psychopathology (including clinical scales GAF, CGI and PANSS), number of emergency visits and number of hospitalization after the first psychotic episode.

In the second one, we use the PSYRATS scale to compare both groups.

Results: In the first comparison, First Episode Psychotic patients with and without hallucinations, we only found significant differences in the number of hospital income, with more hospitalizations in the non hallucinating group ($P=0.001$).

In the second comparison, First Episode Hallucinations versus Chronic Persistent Hallucinations, significant differences were only found in the duration of the hallucinations, which was much higher in chronic persistent hallucinations group ($P=0.001$)

Discussion: Consequently, it seems that first psychotic episode patients without hallucinations have more hospitalizations than first-episode patients with hallucinations. Moreover, we can conclude that the duration of voices is higher in chronic patients with persistent hallucinations than in first psychotic episode hallucinations.

Both results have practical implications in the prognostic importance of hallucinations in first psychotic episodes.

References:

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T109. CLUSTERING OF SCHIZOPHRENIA PATIENT SUBTYPES BY SPECIFIC SYMPTOM DIMENSIONS USING AN UNCORRELATED PANSS SCORE MATRIX (UPSM)

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Background: Interpretation of the efficacy of antipsychotic agents in treating schizophrenia using standard (Marder) Positive and Negative Syndrome Scale (PANSS) factors is confounded by moderate-to-high between-factor correlations. In previous pooled analyses of short-term, placebo-controlled lurasidone clinical trials, clustering and factor analysis identified an uncorrelated PANSS score matrix (UPSM) that generated transformed PANSS factor scores with high face validity (good correlation with standard [Marder] PANSS factors), and high specificity/orthogonality (low levels of between-factor correlation) at both baseline, and when measuring change during short-term treatment. In a validation analysis using 12 separate clinical trials, we previously confirmed that the weighted UPSM coefficients had generalizable utility, yielding transformed PANSS factors with high specificity while retaining good levels of correlation with standard PANSS factors. The aim of the current analysis was to determine whether distinct clinical subtypes of schizophrenia could be empirically derived from the transformed PANSS factor scores at baseline.

Methods: In a new analysis of a pooled sample of 5 placebo-controlled trials ($N=1,710$ patients), K-means clustering of baseline UPSM factor scores in MATLAB was used to identify whether clinical sub-groups could be empirically derived that were characterized by predominant symptom severity in one or more of the transformed PANSS factor domains. For each empirically derived domain thus identified, key demographic and clinical variables were examined, including baseline transformed PANSS factor severity scores [note: the weighted UPSM coefficient yields factor scores with numerical values that are much smaller than are observed with

standard Marder factor scores]; and Montgomery-Åsberg Depression Rating Scale (MADRS) and Negative Symptom Assessment Scale (NSA) scores.

Results: Cluster analysis using the UPSM transformed PANSS Factor scores identified 5 distinct clinical subtypes defined by the severity of the UPSM Factor score relative to the mean score for all patients on the respective transformed PANSS factors. For the predominant positive cluster, the mean transformed PANSS positive factor score was 3.9 (vs. a mean score of 2.9 ± 0.9 SD for all patients); for the predominant hostile cluster, the hostility factor score was 2.6 (vs. a mean score of 1.4 ± 1.1); for the predominant disorganized cluster, the disorganized factor score was 3.0 (vs. 2.5 ± 1.0); for the affective cluster, the anxiety and depression factors, respectively, were 2.3 (vs. 1.8 ± 0.9) and 2.7 (vs. 1.7 ± 1.0); and for the predominant negative cluster, the apathy/avolition and deficit of expression factors, respectively, were 3.1 (vs. 2.5 ± 0.9) and 2.5 (vs. 1.8 ± 0.9). Patients in the predominant negative cluster had the highest NSA score (61 vs. a mean score overall of 53); and patients in the predominant affective cluster had the highest MADRS score (16 vs. a mean score overall of 11).

Discussion: These results provide evidence for a consistent underlying schizophrenia symptom structure and suggest the utility of UPSM transformed PANSS factors for characterizing clinical differences among clearly delineated clinical subpopulations, even within a clinical trial population of acute schizophrenia.

T110. FIRST EPISODE PSYCHOTIC PATIENTS WITH A HISTORY OF FREQUENT CANNABIS USE EXPRESS MORE POSITIVE SYMPTOMS AT ILLNESS ONSET THAN THOSE WHO NEVER USED CANNABIS

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Background: Robust evidence has demonstrated that cannabis use increases the risk to develop psychotic disorders. However, a limited number of studies have investigated if and how cannabis use influences psychopathology profiles at first episode psychosis (FEP).

Based on the evidence that dopamine dysfunction contributes to explain positive symptoms in psychosis, and that the main cannabis' psychoactive component, Δ^9 -Tetrahydrocannabinol (THC), modulates the dopamine system, we hypothesise that: 1) positive symptoms at FEP are more common among psychotic patients who used cannabis compared with never users; 2) this association is a dose-response relationship.

Methods: We analyzed a sample of 1130 FEP patients as part of the EUGEI study, recruited across six countries. The MRC Socio-demographic Schedule was used to collect sociodemographic information. Psychopathology was assessed with the OPERational CRITERia (OPCRIT), and symptom items were analyzed using Mplus to estimate a multidimensional model of psychosis. The Cannabis Experience Questionnaire modified version (CEQmv) was administered to collect information on cannabis, and different patterns of use were computed based on frequency of consumption and type of cannabis, as a proxy of exposure to THC.

Results: The lifetime rate of cannabis use was 63%. Fifty-five percent of cannabis users consumed mostly high-potency cannabis, and 46% showed a daily frequency. Mixed-effects linear regression revealed that frequency of cannabis use was associated with the positive symptom dimension score. Daily users of high-potency cannabis presented with the strongest

association ($B=0.19$, $95\%CI=0.02-0.38$), even after gender, age, ethnicity, other drug use, and study site were controlled for.

Discussion: Our results show that patients with a history of daily use of high potency cannabis express more positive symptoms at psychosis onset, even after taking into account other substance use and relevant sociodemographic factors.

T111. PANSS NEGATIVE SYMPTOM DIMENSIONS ACROSS GEOGRAPHICAL REGIONS: IMPLICATIONS FOR SOCIAL, LINGUISTIC AND CULTURAL CONSISTENCY

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Background: Recognizing the discrete dimensions that underlie negative symptoms in schizophrenia and how these dimensions are conceptualized across geographical regions may result in better understanding and treatment. The expressive-experiential distinction has been shown to have vast importance in relation to functional outcomes in schizophrenia. Previous studies have shown that the PANSS may not be equivalently rated across counties and cultures, suggesting regional differences in both symptom expression and rater judgment of symptom severity. Items that perform in markedly different ways across demographic, regional, cultural, or clinical severity characteristics may not offer valid representations of the target construct. 1) Will the expressive and experiential dimensions of the PANSS vary over 15 geographical regions and will the item ratings defining each dimension manifest similar reliability across these regions? 2) In large multi-center, international trials where data are combined, which of the two dimensions are disposed to social, linguistic and cultural inconsistency?

Methods: Data was obtained for the baseline PANSS visits of 6,889 subjects. Using Confirmatory Factor Analysis (CFA), we examined whether the expressive-experiential distinction would be replicated in our sample. We investigated the validity of the expressive-experiential distinction using Differential Item Functioning (DIF; Mantel-Haenszel) across 15 geographical regions – South America-Mexico, Austria-Germany, Belgium-Netherlands, Brazil, Canada, Nordic regions (Denmark, Finland, Norway, Sweden), France, Great Britain, India, Italy, Poland, Eastern Europe (Romania, Slovakia, Ukraine, Croatia, Estonia, Czech Republic), Russia, South Africa, and Spain - as compared to the United States.

Results: Expressive Deficit: More DIF was observed for items in the Expressive deficit factor than for items relating to experiential deficits. The following regions showed at least moderate to large DIF for all items: Austria-Germany, Nordic, France, and Poland. Of all the items, N3 Poor Rapport showed the most moderate and large DIF ($n = 13$; 86.67%) across countries, with 7 countries reporting large DIF. Similarly, N6 Lack of Spontaneity and Flow of Conversation showed moderate and large DIF for 66.67% countries ($n=10$). Experiential Deficit: Item G16 Active Social Avoidance reported negligible DIF for 14 of the 15 countries investigated (93.33%). Large DIF was observed for N2 Emotional Withdrawal and N4 Passive Apathetic Social Withdrawal for Brazil and India. Seven regions demonstrated no DIF across all items of the PANSS experiential deficit factor (South America-Mexico, Belgium-Netherlands, Nordic, Great Britain, Eastern Europe, Russia, and Spain). Overall, there were many fewer observed items with large DIF for PANSS experiential domain.

Discussion: These results suggest that the PANSS Negative Symptoms Factor can be better represented by a two-factor model than by a single-factor model. Additionally, the results show significant differences in

ratings on the PANSS expressive items, but not the experiential items, across regions. This could be due to a lack of equivalence between the original and translated versions, cultural differences in the interpretation of items, rater training, or understanding of scoring anchors. Knowing which items are challenging for raters across regions can help guide PANSS training to improve results of international clinical trials aimed at negative symptoms.

T112. TRADITIONAL RISK FACTORS NOT ENOUGH TO EXPLAIN THE SHORT LIFETIME EXPECTANCY IN PATIENTS WITH SCHIZOPHRENIA

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Background: Patients with schizophrenia have about 20 years shorter lifetime expectancy compared to healthy population. The cause of this excess in mortality is due to both unnatural and natural causes. While the lifetime prevalence of death due to suicide among patients with schizophrenia is estimated to be 4.9%, Cardiovascular (CV) disease contributes to as much as 50% of the excess mortality in patients with schizophrenia.

This study focuses on whether hypertension, diabetes, hyperlipidemia and tobacco could be related to the reduced lifetime expectancy in patients with schizophrenia spectrum disorder.

Methods: From the Clinical Long-term Investigation of Psychosis in Sweden (CLIPS) study, 79 patients now deceased were analyzed at baseline. Data regarding occurrence of hypertension, diabetes, hyperlipidemia, tobacco but also data on the type of antipsychotic treatment were collected. Two patients, one with zero risk factors and one with 5 risk factors were omitted from the study. We created four categories based on the number of risk factors. 31 patients with one risk factor, 24 patients with two risk factors, 12 patients with three risk factors and 4 patients with four risk factors.

Results: The mean age for death was 61 years and the age varied between 35–83 years old. 18 percent were treated with typical antipsychotics and 61 percent with atypical antipsychotics. 18 percent had both atypical and typical antipsychotic treatment. 17 percent had treatment for diabetes, 27 percent had treatment for hypertension, 8 percent had treatment for hyperlipidemia and 43 percent were using tobacco. The data collected pictures the occurrence of the different risk factors on average 6 years before their death. We compared the age of death for the four different risk factor groups with a Kruskal-Wallis Test and could not find any significant difference between them.

Discussion: Compared to the general population in Sweden there is an increased risk for diabetes in patients with schizophrenia, however the prevalence of hypertension is the same, 27 percent for 18 years old and elder, in the general population. Daily tobacco use was rather high among patients with schizophrenia. Compared to general population, women and man with 10 percent respective 8 percent higher. Even if both diabetes and tobacco use has a high prevalence in patients with schizophrenia, it may not be enough to explain the reduced lifetime expectancy in patients with schizophrenia This study indicates that metabolic syndrome and the risk factors it contains need to be further studied in order to find its association to early death in patients with schizophrenia.

T113. THE LINK BETWEEN BLUNTED AFFECT AND SUICIDE IN SCHIZOPHRENIA: A SYSTEMATIC REVIEW

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