

Methods: We analyzed a national hospitalization database that contained all hospitalization episodes registered in Portuguese public hospitals from 2008 to 2015. All episodes with a primary diagnosis of mental disorder defined as ICD-9-CM codes 290.x-319.x were included. Prolonged hospitalizations were defined as having a LoS \geq P97.5; LOS \geq 180 days or LOS \geq 1 year. Age, sex, length of stay, in-hospital mortality were analysed.

Results: The LoS \geq P97.5(\geq 62 days) group comprised 3911 hospitalizations (2.3% of all psychiatric hospitalizations) and 1755 patients. The median LOS was 81 days and the mean age was 51 years. Sex was equally distributed, though a higher frequency of male patients was found on the \geq 180 days (n=364) and \geq 1 year (n=121) groups. Psychotic disorders were the main diagnosis at discharge (n= 1769, 45.2%), followed by mood disorders (n=1057, 27.0%) and dementia (n=451, 11.5%). In-hospital mortality increased in the higher LoS groups (1.1%; 4.4%; 9.1%, respectively). **Conclusions:** Overall, middle aged patients with psychotic disorders represent most of the prolonged hospitalizations occurring in acute psychiatric wards. Community-based programs require further development to meet the existing needs.

Disclosure: No significant relationships.

Keywords: length of stay; Administrative Database; psychiatric hospitals; Healthcare utilization

O151

Gender differences in a forensic psychiatric ward: A retrospective study

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Introduction: The criminality associated with psychiatric disorders has been extensively studied with some studies showing a greater risk of violence in these patients. The gender differences in the general psychiatric population and can have an impact in the characteristics of a forensic population.

Objectives: The authors aim to study the gender differences regarding diagnosis, type of crime and other characteristics in a forensic ward population.

Methods: A retrospective study was designed, including patients admitted in the Forensic ward of Coimbra Hospital and University Center between 2018 and 2020.

Results: Our study included 110 patients, 19 women and 91 men. Although psychotic disorders were the most common in both groups, particularly schizophrenia, mood disorders were significantly more common in women, with a risk of 7,768. This was explained by a greater prevalence of depressive episodes in women. These were associated with a particular type of crime, infanticide, that was not found in the men group. This might contribute to a greater prevalence of violent crimes in women. There was a chance of committing crimes against the offspring of 24 in women. The use of psychoactive substances was significantly greater in men, with a chance of 12,906.

Conclusions: Considering that mood disorders are more common in women, these findings are easy to understand. The predominance of female perpetrators in infanticide is well described in the literature and can be associated with peripartum depression and gender roles. In this sample substance abuse was more common in man, like it's seen in the general population.

Disclosure: No significant relationships.

Keywords: infanticide; Gender; mood disorders

O152

Comorbidity with substance abuse and its influence in a forensic population: A retrospective study

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Introduction: The criminality associated with psychiatric disorders has been extensively studied with some studies showing a greater risk of violence in these patients. Substance abuse has been long linked to criminal and antisocial behaviours, but what happens when is in comorbidity with other psychiatric disorders.

Objectives: The authors aim to study the impact of substance abuse comorbidity in type of crime and other characteristics in a forensic ward population.

Methods: A retrospective study was designed, including patients admitted in the Forensic ward of Coimbra Hospital and University Center between 2018 and 2020.

Results: Our study included 110 patients, 39 of which had comorbidity with substance abuse. Although the authors couldn't find differences in the type of crime committed regarding the patient's primary diagnosis, substance abuse was significantly associated with non-violent crimes. The prevalence of homicide was significantly inferior in psychoactive substance users and the prevalence of domestic violence was significantly greater. However, the prevalence of a criminal history was significantly higher in patients with comorbidity with substance abuse. Patients with substance abuse had significantly higher childhood adverse events reports.

Conclusions: Interestingly, criminal behaviors prior to admission were more frequent in patients with substance abuse, which is understandable. However, the type of crimes were significantly less serious in this patients, which can mean that, although these consumptions are a risk factor for criminal behavior, the association in less important in crimes like murder. The exposition to childhood adverse events is a well-known risk factor for substance abuse in adulthood.

Disclosure: No significant relationships.

Keywords: substance abuse; ACE; Dual pathology; Forensic

Genetics & molecular neurobiology

O153

The DRD2/ANKK1 Taq1A polymorphism in CYP2D6 extensive metabolizers is associated with the severity of extrapyramidal side effects of haloperidol treatment in schizophrenia spectrum disorders patients

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Introduction: Schizophrenia is one of the most severe mental disorders. Haloperidol and other first-generation antipsychotics are widely used for schizophrenia treatment, but have prominent side effects, primarily extrapyramidal symptoms (EPS). The EPS severity is highly variable and may be underlied by genetic factors. **Objectives:** We performed a prospective study to test the association of DRD2/ANKK1 Taq1A polymorphism (rs18000497) and CYP2D6 phenotype, predicted from genotypes using 8 CYP2D6 alleles (*3, *4, *5, *6, *9, *10, *41, xN) with EPS severity during haloperidol treatment in schizophrenia spectrum disorders patients.

Methods: 57 inpatients with schizophrenia spectrum disorders (42,1% females; mean age - $46,7 \pm 11,8$ y.o ($M \pm SD$) of European ancestry were enrolled in the study. Abnormal Involuntary Movement Scale (AIMS), Barnes Akathisia Rating Scale (BARS), Simpson-Angus Scale (SAS) were used to assess EPS on two time-points: day 1 and day 21 of haloperidol treatment.

Results: Taq1A T-allele carriers in contrast to wild-type allele homozygous patients had higher scores of BARS ($p=0.029$) and SAS ($p=0.024$) on day 21. After stratification by CYP2D6 phenotype, these differences were observed only in extensive metabolizers ($p=0.006$ and $p=0.001$ respectively), although the CYP2D6 phenotype itself was not associated with EPS severity. The combined effect of Taq1A T allele with CYP2D6 extensive phenotype on BARS score on day 21 was confirmed by General Linear Model ($p=0.013$).

Conclusions: Our results show that minor Taq1A T-allele is associated with the severity of EPS after 3 weeks of haloperidol treatment only in CYP2D6 extensive metabolizers. That highlights the importance of using both pharmacokinetic and pharmacodynamic genetic markers in pharmacogenetic EPS risk assessment.

Disclosure: No significant relationships.

Keywords: Antipsychotics; Haloperidol; Pharmacogenetics

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Introduction: Epigenetics hypothesizes a crucial link between postnatal risk factors, individual response to stress, DNA methylation and psychiatric symptomatology changes during life.

Objectives: We analyzed methylation within two gene exons: NR3C1 and SLC6A4, which are involved in responses to environmental stressors. We investigated the relationship between methylation, postnatal risk factors and psychopathology assessed by Child Behavior Checklist (CBCL) in our help-seeking sample evaluated in infancy (W1), preadolescence (W2) and adult life (W3).

Methods: Postnatal risk factors data were collected at W1 in 205 clinical subjects (156 M, 49 F; age= $9,13 \pm 1,95$). The CBCL scores were collected at W1 and W2 (W2 age= $14,52 \pm 2,12$). Data regarding methylation were collected at W2. At W3 we are also collecting clinical scores. A Spearman correlation coefficient was calculated between methylation percentage and clinical data at W2. The externalizing and internalizing trajectories were evaluated through repeated measure ANOVA with postnatal risk factors (presence/absence) as between-groups factor.

Results: Significant associations were found between methylation and internalizing and total clinical scores (Table 1). The rm-ANOVA results showed a significant interaction between the CBCL internalizing score and presence/absence of postnatal risk, with higher internalizing problems in subjects that were exposed to postnatal risk factors. This effect was significant at W2 but not at W1 (Figure 1).

Conclusions: Psychopathological symptoms trajectories could depend on epigenetics and early environmental risk factors. Further

Table 1

Spearman's rho		SLC6A4 Gene Exon 1.1	SLC6A4 Gene Exon 1.18
Internalizing scale	Coefficient		,195**
	p value		0,005
Total scale	Coefficient	,149*	
	p value	0,033	

O154

Associations between genes methylation, postnatal risk factors and psychiatric symptoms in a clinical sample of children and adolescents: Preliminar results from the remind longitudinal study

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