Objectives: This study aims to explore the association between ECMHP's stigma towards mental health and their QoL, and to identify predictors of QoL among this population.

Methods: In this cross-sectional study, we designed an online survey to collect data among ECMHP, identified as having completed training since less than 7 years. QoL was assessed using the WHO-QoL. Stigma towards mental health was measured with the Opening Minds Stigma Scale for Health Care Providers (OMS-HC). Other general sociodemographic data were also collected. Descriptive results are resumed in absolute and relative frequencies for categorical variables. Student's t-test and ANOVA were used to analyse scores in WHO-QoL and OMS-HC according to categorical variables. Pearson's correlation coefficient was used to asses the association between WHO-QoL and OMS-HC. Simple and multiple linear regression were used to study the effect of stigma on QoL, taking into account potential confounders.

Results: We collected data from 277 ECMHP from Europe (54.15%) and Asia (45.85%). Only 20% of our sample knew that their workplace has staff dedicated for mental health practitioners support, and among those, only 44% had visited it. OMS-HC total scores were significantly higher (*p<0,05*) in nurses and practitioners without a sufficient support system and without a mental disorder. WHO-QoL total scores were significantly higher in participants with sufficient support systems, and without a mental or physical illness. There was a negative correlation between OMS-HC and WHO-QoL total scores. Univariate analysis showed that OMS-HC total scores predicted WHO-QoL total scores. In the multivariate analysis, OMS-HC total scores, having a mental illness and having sufficient support, independently predicted WHO-QoL total scores, even when adjusted for sociodemographic variables.

Conclusions: Stigma towards mental health is related to QoL in ECMHP. Also, having sufficient support in the workplace improves QoL in this population. More studies are needed to help clarify the relationship between stigma and QoL using a longitudinal design.

Disclosure of Interest: None Declared

Suicidology and suicide prevention

O0032

BDNF plasma concentrations, cognitive test performances and lifetime suicide ideation in psychotic disorders: a secondary analysis.

P. Paribello[1]*, M. Manchia[1,2], U. Isayeva[1], R. Collu[3], P. Federica[1], M. Scherma[3], C. Pisanu[3], A. Meloni[3], C. C. Zai[4], D. Congiu[3], A. Squassina[3], W. Fratta[3,5], P. Fadda[3,5] and B. Carpiniello[1]

[1]Department of Medical Sciences and Public Health, Unit of Clinical Psychiatry, University Hospital Agency of Cagliari, Cagliari, Italy; [2]Department of Psychiatry, Institute of Medical Science, Laboratory Medicine and Pathobiology, University of Toronto, Toronto, Canada; [3]Division of Neuroscience and Clinical Pharmacology, Department of Biomedical Sciences, University of Cagliari, Cagliari, Italy; [4]Tanenbaum Centre for Pharmacogenetics, Campbell Family Mental Health Research Institute, Centre for Addiction and Mental Health, Toronto, Canada and [5]Centre of Excellence "Neurobiology of Dependence", University of Cagliari, Cagliari, Italy
*Corresponding author.

Introduction: Psychotic disorders present a significant lifetime risk for suicide. Past estimates suggest that up to 25-50% of individuals with schizophrenia (SCZ) may attempt suicide during their lifetime. A growing body of literature indicates that the level of cognitive performances may be associated with a differing level of lifetime suicide attempts, albeit inconsistently depending on the diagnostic category and study setting. However, the vast majority of the literature in the field is composed of cross-sectional studies, limiting the overall interpretation of the available evidence.

Objectives: In the present study, we probed the possible association of BDNF plasma levels, cognitive functions assessed through the Brief Assessment of Cognition in Schizophrenia (BACS) and lifetime suicide ideation and/or attempts (LSI+LSA). More specifically, we tested whether such association would persist during the 2 years follow-up divided in 5 different timepoints at 6-month intervals, if present.

Methods: The present study represents a secondary analysis of a previously described cohort (Manchia et al. Brain Sci. 2022 Dec 4;12(12):1666). The sample comprised 105 subjects with SZC or schizoaffective disorder. We employed the 1) Wilcoxon test for non-parametric data 2) linear modelling to test the possible association of BACS-defined cognitive task performances with LSI+LSA. We also investigated if either BDNF plasma levels or four tested BDNF SNP genes would mediate this association.

Results: From a total of 105 subjects, data relevant to the analysis were available for 89 subjects. We observed a significant association between BACS-Letter fluency task (BACS-LF) with LSI +LSA, persisting even when adjusting for gender, duration of untreated psychosis, total Positive and Negative Syndrome Scale score, age, chlorpromazine equivalents of antipsychotic therapy and for the effect of time. The association remained significant even when adjusting with the Bonferroni-Holms method for multiple comparisons (p=0.002). No association was found either for BDNF plasma levels or the tested BDNF genes for the tested outcomes.

Conclusions: In our sample, higher BACS-LF performances appeared to be associated with a higher lifetime risk of LSI+LSA. This report adds to the previous literature suggesting that different cognitive performance levels may represent one of the many chronic risk factors associated with LSI+LSA, and that may ultimately complexly interact with more proximal ones.

Disclosure of Interest: None Declared

O0034

Examination of Speech Analysis to Predict Suicidal Behavior in Depression

S. Yünden[1]*, M. Ak[1], M. Sert[2], S. Gica[1], O. Çinar[3] and Y. A. Acar[4]

[1]Psychiatry, Necmettin Erbakan University Meram Faculty of Medicine Hospital, Konya; [2]Computer Engineering, Başkent University Faculty of Engineering; [3]Emergency Service, Acıbadem Ankara Hospital, Ankara, Türkiye and [4]Emergency Service, Mercer University School of Medicine, Macon, United States
*Corresponding author.

Introduction: Suicide is one of the leading causes of preventable deaths worldwide. The psychiatric disorder that is most strongly

associated with suicide is depression. It is crucial to develop clinical tools that can provide objective data to assess suicide risk in clinical settings. Depression and high suicide risk may lead to physiological changes that can affect the speech pattern. Prior research has indicated that the acoustic and prosodic characteristics of speech may hold potential clues for assessing suicide risk. Additionally, specific speech parameters may serve as discriminators for identifying individuals at risk. In recent years, deep learning-based- models have yielded successful results in identifying such alterations in speech signals.

Objectives: The aim of our study was to examine specific voice analysis parameters between control, depressive and high suicide risk groups. We also aimed to investigate the effect of voice-related variables in predicting suicidal behavior in patients with depression using an artificial intelligence model. The results of voice analysis are intended to serve as a starting point for the development of future artificial intelligence algorithms.

Methods: The study sample consisted of 30 near-term suicidal patients, 30 patients with major depression and 30 healthy controls. The participants were presented with a pre-determined text and a voice recording was carried out. Feature extraction and model training for three tasks, namely depression or not, suicide or not, and depression or suicide were carried out. Mel-Frequency Cepstral Coefficients (MFCCs), deep learning-based (VGGish), formant and prosodic features were extracted to analyze the sound characteristics of the participants. The Support Vector Machine was used as the machine learning algorithm for classification and the three models were trained for each task. A 10-fold cross-validation was carried out and presented by metrics including accuracy, precision, sensitivity and specificity.

Results: Among the metrics examined, MFCCs for the "Suicide or not" task were found to be more successful with rates of 0.90, 0.88, 0.93 and 0.86 for accuracy, precision, sensitivity, and specificity, respectively. MFCCs were also more successful for the "Depression or suicide" task with rates of 0.68, 0.66, 0.76, and 0.60 for accuracy, precision, sensitivity, and specificity, respectively. Among the metrics examined for the "Depressed or not" task, VGGish was more successful with rates of 0.73, 0.81, 0.70, and 0.76 for accuracy, precision, sensitivity, and specificity, respectively.

Conclusions: To the best of our knowledge, our study is the first to compare the VGGish and other features of speech (MFCCs, prosodic, formant features) between high suicide risk, depression and control groups. Classification parameters developed using the VGGish and MFCCs features of speech could be useful in predicting suicide risk in future studies.

Disclosure of Interest: None Declared

O0035

Deliberate self-harm and suicide in people with immigrant background: how can reason for immigration and country of origin differentiate the risks?

P. Qin

National Centre for Suicide Research and Prevention, University of Oslo, Oslo, Norway

Introduction: A growing body of research have devoted into suicide and deliberate self-harm in immigrant population, but no study has examined how reason for immigrating to the host country differentiates the risks.

Objectives: To gain firm insight into suicide and deliberate self-harm among peopel with immigrant background.

Methods: Norwegian registers were interlinked to identify all individuals who died by suicide in 1992-2018 and who received emergency treatment for non-fatal deliberate self-harm (DSH) in 2008-2018, and to construct the respective databases via a nested case-control design. Rates and relative risks of suicide and DSH were assessed according to immigrant background, country of birth and reasons of immigration, and in the context of personal socioeconomic status.

Results: People with an immigrant background accounted for 11.6% of all suicides in 1992-2018 and 17.9% of all DSH incidents treated in hospital emergency departments in 2008-2018. The rates of both suicide and DSH were highest in people born abroad with two Norway-born parents (mean rate: 19.4/100 000 for suicide and 280.9/100 000 for DSH) and lowest in the second-generation immigrants. Compared with the native Norwegians, suicide risk was significantly higher for those foreign-born with two Norway-born parents (HR=1.50) and those born in Norway with 1 one foreign-born parent (HR=1.20), but was significantly lower for the first- and second-generation immigrants. The associated risks remained almost unchanged when the data were adjusted for personal differences in education, marital status, income and place of residence in Norway. The analyses on deliberate self-harm exhibited similar patterns of results as for suicide, although the estimated reduced risks in the first- and second-generation immigrant is somewhat smaller. Evidently, the risks for suicide and DSH varied significantly by reason of immigration and country of origin. Immigrants coming for education had the lowest risk for suicide and self-harm, and those coming for work the second lowest. The risks for immigrants coming for family unity were lower than the natives, but significantly higher than counterparts coming for job or education from the same country. Among immigrants coming to Norway as a refugee or asylum seeker, the risk of suicide was comparably high as those coming for work, but the relative risk for self-harm was significantly higher. The increased risks associated with the mixed immigration background tended to be slightly higher in females than in males, and were likely confined to adoptee population.

Conclusions: Risks for suicide and deliberate self-harm in people with an immigrant background differs significantly by reason of immigration and country of origin. The findings should be taken into account in efforts of mental healthcare and suicide prevention targeting immigrant population.

Disclosure of Interest: None Declared

O0036

Prospective mortality in patients with non-fatal deliberate self-harm: a national cohort study

P. Qin

National Center for Suicide Research and Prevention, University of Oslo, Oslo, Norway