

## COVID-19 and Related Topics 10

### EPP0794

#### Combining international survey datasets to identify indicators of stress during the COVID-19 pandemic: A machine learning approach to improve generalization

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**Introduction:** The magnitude and exceptional opportunity to research the psychological distress of shelter in place resulted in a publication frenzy on a smorgasbord of research studies of variable scientific robustness. Confinement, fear of contagion, social isolation, financial hardship, etc. equated to stratospheric stress levels. The decline in protective factors as a function of quarantine anecdotally reflected historic rates of anxiety and depression.

**Objectives:** In this study, we combined 12 variegated datasets and developed an algorithm to build a model to identify key predictors of pandemic-related stress with high accuracy and generalizability.

**Methods:** This study reports on existing published data. We first describe the International (Adamson et al., 2020) and then the Italian dataset (Flesia et al., 2020). The time-frame (first wave of lockdown), method (survey), measurement tool (Perceived Stress Scale), and outcome measures were extremely similar to enable consolidation of datasets (see Figure 1). The Flesia et al., (2020) data set was integrated into the Adamson et al., (2020) dataset as the first step towards data validation construction of the ML predictive model.

**Results:** We aim to demonstrate the strength of combining cross-cultural datasets, and the applicability of ML algorithms to facilitate the process and generate a predictive model that identifies and validates key predictors of pandemic-related stress and accommodates for interaction with demographic, cultural, and other mitigating factors while concurrently having high generalizability.

**Conclusions:** We believe our model provides clinicians, researchers, and decision-makers with evidence to investigate the moderators and mediators of stress, and introduce novel interventions to mitigate the long-term effects of the COVID-19 pandemic.

**Disclosure:** No significant relationships.

**Keywords:** machine learning; Stress; Covid-19; international

### EPP0793

#### Exploring the Experiences of Psychiatric Nurses During Care of Patients with COVID-19

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**Introduction:** The global coronavirus outbreak was viewed as a severe threat to healthcare providers, particularly nurses. COVID-19 has numerous public health management dimensions, including the reorganization of health care workers to support and assist patients.

**Objectives:** This study used a qualitative approach to gain an insight into the experiences of psychiatric nurses who were treating quarantined patients at various hospitals. This research aimed to investigate the experiences of reassigned psychiatric nurses during the COVID-19 outbreak in Hungary.

**Methods:** Using a phenomenological approach, we enrolled 7 nurses who provided care for COVID-19 patients from July 2020 to April 2021. The interviews were conducted face-to-face in the form of semi-structured interviews and were analysed using a health-psychology approach: interpretive phenomenology analysis.

**Results:** Our study shows that pandemic public health reorganization creates novel situations and issues that nurses are forced to address. Our findings suggest that three themes emerge from the data to describe psychiatric nursing: (1) Usage of earlier clinical experiences, (2) Recognizing mental issues, (3) Social networks.

**Conclusions:** This study suggests professional self-concepts and job satisfaction in relation to treating quarantine patients are affected by the identity and conflicts of psychiatric nursing in a novel situation.

**Disclosure:** No significant relationships.

**Keywords:** Covid-19; Psychiatric Nursing; Interpretative Phenomenology Analysis

### EPP0794

#### Mentalizing and emotion dysregulation in emerging adults during the COVID-19 pandemic: a pilot short-term longitudinal study

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**Introduction:** The COVID-19 pandemic represents an epidemiological and psychological crisis (APA, 2020). In this context, although emerging adults are less likely to get COVID-19, they might have suffered from the national lockdowns over the last year, as they are indeed involved in a crucial development period wherein interpersonal relationships undertake a fundamental function in their psychological well-being. To this end, mentalizing abilities

and emotion dysregulation may play a crucial role as possible salutogenic or pathogenic factors on the onset of psychiatric symptoms during the three waves of the COVID-19 pandemic.

**Objectives:** 1) To examine the relationship between emotion dysregulation assessed at the end of the first wave of COVID-19, mentalizing assessed during the second wave, and psychiatric symptoms levels assessed during the third wave. 2) To examine the moderation role of mentalizing within the relation between emotion dysregulation and psychiatric symptoms.

**Methods:** Participants were 83 non-clinical emerging adults ( $M_{\text{age}}=22.18$ ,  $SD=4.36$ ; 57.8% females). Measures applied were Difficulties in Emotion Regulation Scale (DERS) to examine emotion dysregulation, Reflective Functioning Questionnaire to examine mentalizing (RFQ\_uncertainty; RFQ\_certainty) and Symptom Checklist-90-Revised (SCL-90) to examine psychiatric symptoms (Global Severity Index, GSI).

**Results:** DERS\_total score ( $r=.31$ ,  $p=.03$ ) and both RFQ\_uncertainty ( $r=.41$ ,  $p<.01$ ) and RFQ\_certainty ( $r=-.33$ ,  $p=.02$ ) are associated with GSI. Secondly, a significant moderation role by RFQ\_u emerged within the relation between DERS\_total score and GSI ( $\Delta R^2=.067$ ,  $\beta=.001$ ,  $SE=.00$ ,  $CI[.000, .002]$ ).

**Conclusions:** These results suggest that mentalizing and emotion dysregulation may play a pivotal role in the onset of psychiatric symptoms during the COVID-19 pandemic. Clinical implications are discussed.

**Disclosure:** No significant relationships.

**Keywords:** Covid-19; Emotion dysregulation; mentalizing; emerging adults

## EPP0795

### Phonemic fluency in post-ICU patients after severe COVID-19 infection: The role of cognitive reserve.

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**Introduction:** Cognitive function may be impaired in COVID-19 patients, especially in executive functions such as phonemic fluency. Among risk factors, inflammation during hospitalization is related with worse cognitive performance in the long term. On the other side, it has been shown that cognitive reserve (CR) protects against cognitive impairment associated with brain damage, psychiatric disorders and neurodegenerative diseases.

**Objectives:** Our aim is to study the protective role of cognitive reserve in phonemic fluency to inflammation after SARS-CoV-2 infection.

**Methods:** We enrolled a cohort of 102 severe SARS-CoV-2 survivors after Intensive Care Unit (ICU) discharge and 58 agreed to participate in this 6-month follow-up study. Patients with previously known cognitive impairment were excluded. Demographic, clinical and laboratory data were collected. To assess the phonemic fluency, we used the Controlled Oral Word Association Test (COWAT) controlling the effects of age and education. Inflammation was recorded according to the number of days with high CRP.

ANCOVA analyses were used to test the effect of interaction between medical variables and cognitive reserve on phonemic fluency.

**Results:** The COVID-19 inflammation interacted with CR in phonemic fluency ( $F= 6.47$ ,  $p= 0.01$ ), with worse performance in patients with low CR (mean 16.7 (10.2-23.3)) than those with high CR (mean 37.7 (34.3-41.2)) in function of number of days with high PCR during ICU stay.

**Conclusions:** The role of the cognitive reserve is important to reduce the cognitive impairment related with COVID-19 inflammation in post-ICU patients.

**Disclosure:** No significant relationships.

**Keywords:** cognitive impairment; Neurological manifestations; Covid-19; Cognitive reserve

## EPP0796

### Mental Health in Individuals with a History of Mental Disorder during COVID-19-Pandemic - Preliminary Results of the National Cohort Study in Germany

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**Introduction:** Research of COVID-19-Pandemic mental health impact focus on three groups: the general population, (2) so called vulnerable groups (e.g. individuals with mental disorders) and (3) individuals suffering COVID-19 including Long-COVID syndromes.

**Objectives:** We investigate whether individuals with a history of depression in the past, react to the COVID-19 pandemic with increased depressive symptoms.

**Methods:** Longitudinal Data stem from the NAKO-Baseline-Assessment (2014-2019, 18 study centers in Germany, representative sampled individuals from 20 to 74 years) and the subsequent NAKO-COVID-Assessment (5-11/2020). The sample for analysis comprises 115.519 individuals. History of psychiatric disorder was operationalized as lifetime self-report for physician-diagnosed depression. Depressive symptoms were measured with the PHQ 9.

**Results:** Mean age of the sample at baseline was 49.95 (SD 12.53). It comprised 51.70 women; 14 % of the individuals had a history of physician-diagnosed depression. Considering a PHQ-Score with cut-off 10 as a clinical relevant depression, 3.65 % of the individuals without history of depression and 24.19 % of those with a history of depression were depressed at baseline. The NAKO-COVID-Assessment revealed 6.53 % depressed individuals without any history of depression and a similar rate of 23.29 % in those with history of depression.

**Conclusions:** In contrast to that what we expected, individuals with a history of a physician-diagnosed depression, did not react with