**Conclusion:** The COVID-19 pandemic had an important impact in elderly's mental health. This subject should be addressed by profissionals / caregivers and measures tominimize negative consequences are in order.

# 557 - Generalized anxiety disorder in older adults: acceptability of guided self-help by a lay provider and preference among different treatment modalities

Anne-Julie Gagné, Philippe Landreville, Patrick Gosselin, Pierre-Hugues Carmichael

A cognitive-behavioral guided self-help conducted by lay providers (CBT-GSH-LP) had been shown to be effective in treating anxiety and may help facilitate access to treatment. The first objective of this study was to assess the acceptability the CBT-GSH-LP for the Generalised Anxiety Disorder in adults aged 60 and over. Its acceptability was compared to that of the same treatment conducted by a psychotherapist (CBT-GSH-PSY) and to that of a face-to-face cognitive behavioral therapy with a psychotherapist (CBT- PSY). The second objective was to assess the preference of the participants for these treatment modalities. As a secondary objective, variables potentially associated with acceptability or preference were explored, as well as reported reasons for treatment preference. Participants were recruited in community centers and private residences. They had to complete a sociodemographic questionnaire, read descriptions of the three treatments, and complete the Treatment Evaluation Inventory for each one, then to place those treatment in order of preference as well as indicating the reason for their preferred treatment. ANOVAs were performed to identify differences in acceptability scores between the three treatment modalities and proportions were calculated for preferred treatment and reasons associated. CBT-GSH-LP was considered moderately acceptable by participants (N = 116; mean age =

70.5 years), although significantly less acceptable than the other two treatment modalities. In addition, the proportion of participants who found CBT-GSH-LP to be at least moderately acceptable was high (59,3%), although lower than that of the other two treatment modalities (CBT-GSH-PSY: 85,8%; CBT-PSY: 91,2%). Consequently, the preferred treatment of participants was CBT-PSY followed by CBT-GSH-PSY, then CBT-GSH-LP. Among participants preferring CBT-GSH-LP, its long-lasting effect, ease of access,

training of the therapist, required patient involvement, and autonomy afforded by treatment were the top reasons. Regarding characteristics, the results show that single and widowed older adults considered CBT-GSH-LP more acceptable than married, divorced, or separated people. Thus, although it is not the preferred treatment modality for older adults, CBT-GSH-LP is acceptable and would benefit from being better known and used for generalized anxiety disorder.

## 558 - MULTIMODAL EEG-MRI IN THE DIAGNOSIS OF MILD COGNITIVE IMPAIRMENT WITH LEWYBODIES

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### **Background:**

Differentiating mild cognitive impairment with Lewy bodies (MCI-LB) from mild cognitive impairment due to Alzheimer's disease (MCI-AD) is challenging due to an overlap of symptoms. Quantitative EEG analyses have shown varying levels of diagnostic accuracy, while visual assessment of EEG may be a promising diagnostic method. Additionally, a multimodal EEG-MRI approach may have greater diagnostic utility than individual modalities alone.

## **Research Objective:**

To evaluate the utility of (1) a structured visual EEG assessment and (2) a machine learning multimodal EEG-MRI approach to differentiate MCI-LB from MCI-AD.

#### Method:

300 seconds of eyes-closed, resting-state EEG from 37 MCI-LB and 36 MCI-AD patients were analysed. EEGs were visually assessed for the presence of diffuse, focal, and epileptiform abnormalities, overall grade of abnormalities and focal rhythmic delta activity (FIRDA). Random forest classifiers to discriminate MCI-LB from MCI-AD were trained on combinations of visual EEG, quantitative EEG and structural MRI features. Quantitative EEG features (dominant frequency, dominant frequency variability, theta/alpha ratio and measures of spectral power in the delta, theta, prealpha, alpha and beta bands) and structural MRI features (hippocampal and insular volumes) were obtained from previous analyses of our dataset.

#### Results:

Most patients had abnormal EEGs on visual assessment (MCI-LB = 91.9%, MCI-AD = 77.8%). Overall grade ( $X^2$  (73, 2) = 4.416, p = 0.110), diffuse abnormalities  $X^2$ (73,1) = 3.790, p = 0.052, focal abnormalities  $X^2$  (73,1) = 3.113, p = 0.077 and FIRDA  $X^2$ (73,1) = 0.862, p = 0.353 did not differ between groups. All multimodal classifiers had similar diagnostic accuracy (area underthe curve, AUC = 0.681 - 0.686) to a classifier that used quantitative EEG features only (AUC =0.668). The feature 'beta power' had the highest predictive power in all classifiers.

#### Conclusion:

Visual EEG assessment was unable to discriminate between MCI-LB and MCI-AD. However, future work with a more sensitive visual assessment score may yield more promising results. A multimodal EEG-MRI approach does not enhance the diagnostic value of quantitative EEG alone in diagnosing MCI-LB. (326 words)

## 559 - Neuropsychiatric symptomatology after severe COVID-19 in older survivors

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**Background:** The coronavirus disease 2019 (COVID-19) has rapidly spread worldwide, leading to increased concerns about long-term patients' neuropsychiatric morbidity. Currently, there is still few data regarding mental health after hospital discharge of severe COVID-19 elderly patients. Considering this, the present study aims to characterize the neuropsychiatric morbidity in old severe COVID-19 patients.

Methods: In the context of an ongoing multidisciplinary research project, this study analyzed a subsample of patients aged ≥60 years, admitted due to COVID-19, during the first wave, in the Intensive Care Medicine Department (ICMD) of a University Hospital in Porto, Portugal. ICMD length of stay (LoS) ≤24h, terminal illness, major auditory loss or inability to communicate at the time of follow- up were used as exclusion criteria. Participants were evaluated by telephone in average 99 (±32) days after being discharged from the hospital, with Six-item Cognitive Impairment Test, PatientHealth Questionnaire and Generalized Anxiety Disorder Scale. Sociodemographic and relevant clinicaldata were obtained from hospital electronic records and clinical interview.

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