Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Participants were instructed to maintain fixation on a small dot at the centre of the screen. We presented two randomized stimuli, a standard stimulus (80% of times) and a target stimulus (20% of times). The participants were instructed to press a button for the target stimulus only.

Results: We first evaluated if MEYE could detect event-related pupil transient due to auditory stimulation in mice. We detected a significant pupillary dilation after the onset of the auditory stimulus, together with a peak in locomotion (Pupil: P-value < 0.01, Velocity: P-value < 0.01, Permutation Test). This event-related transient is a proxy of arousal changes and can be considered a manifestation of emotional processing. To measure cognitively driven pupil signals, we performed pupillometry while participants executed an oddball task. We recorded the same eye using both the MEYE and an EyeLink 1000. We found a stronger pupil dilation for the target stimulus than for the standard stimulus, that is detected by both the recording systems (MEYE: P-value < 0.001, EyeLink: P-value < 0.001, T-Test Paired). Moreover, the single-subject pupillary evoked amplitudes showed a positive correlation between the two techniques (P-value: 0.01; r = 0.88, Pearson Correlation).

Conclusions: We have developed a deep learning tool called MEYE, using a CNN to detect and measure real-time changes in pupil size both in humans and mice. By embedding artificial intelligence algorithms in a web browser, MEYE can be used by non-technical operators opening the possibility to perform pupillometry widely, cost-effectively, and in a high-throughput manner. It would also be a promising tool in the recent field of telemedicine, given its minimal setup that can run on a notebook or even on a smartphone it allows possible large-scale recruitment of subjects directly in their own homes.

No conflict of interest

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P.0205

Telepsychiatry with adolescents in the time of covid: family caregiver perspectives

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Introduction: In response to the Coronavirus Disease 2019 (COVID-19) pandemic, telepsychiatry was suddenly introduced in mental health services. Evidence concerning the efficacy and viability of these interventions in child and adolescent population is lacking. This study aims at developing a thorough understanding of family caregiver experiences with phone consultations, at the beginning of the pandemic.

Material and Methods: We interviewed adolescent’s caregivers under psychiatric follow-up, that were assisted at a phone consultation between April and June 2020. We used a semi-structured interview, that compared phone to physical consultations, regarding different dimensions: 1) accessibility and availability of care; 2) effectiveness of communication (concretely, in the sub-dimensions of expression by oneself, understanding by the doctor and understanding by oneself); 3) therapeutic relationship (specifically, in the sub-dimensions of one’s own posture in the relationship, empathy / respect for the doctor and trust in the doctor); 4) therapeutic results; 5) satisfaction with care and 7) confidentiality.

Results: Out of the 50 interviewed adolescent’s caregivers, 34 (68%) consider there is an increment in access and availability with phone consultations. To 28 caregivers (56%), the way of expressing themselves has been affected and 33 (66%) believe that the doctor understands them in just the same manner. The majority considers there is no difference in doctor’s empathy/respect (n=34, 68%), neither in reliance on the doctor (n=44, 88%). More than a half refers the therapeutic results are inferior (n=27, 54%) but the same number mentions satisfaction with the care provided (n=27, 54%). Confidentiality and trust in doctor seem to be the same, in telephone consultations, to 40 (80%) caregivers, while 8 (16%) said it is more difficult, due to impaired communication and doubts about maintaining privacy. Curiously, 2 parents (4%) consider that this aspect is superior in the telephone consultation, because face-to-face consultations are for the adolescent, and this is a way of having an exclusive and private time for them.

Discussion: One of the findings to be highlighted is the benefit of phone consultations in terms of accessibility and availability of care (due to the absence of travel and less time spent). Communication seems to be impaired in phone consultations, which was mainly justified by the absence of body language and eye contact. However, due to increased access and availability, in the face of public health contingencies, most patient’s caregivers were pleased with the care received.

Conclusion: Telepsychiatry has emerged as a promising treatment option in the pandemic context. Nevertheless, to be a viable complement and/or alternative to physical con-
sultations, it demands further training and investigation. It could also be important to evaluate the perspective of the adolescents and health professionals themselves, crossing it with that of caregivers, for a complete assessment of the experience from different points of views.

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P.0206
Mental health during covid-19 infection

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Background: Patients with Covid-19 are under great psychological stress, which can lead to the development of various psychiatric symptoms and maladaptive responses, such as anxiety, fear, depression, and insomnia. Psychiatric and psychological support can play a fundamental role in the general control of the disease. During the pandemic, whenever possible, services must provide help through telemedicine approaches. Digital solutions such as “PLANO-A-SAÚDE-C19” that allow to evaluate and to monitor the signs of infection of the SARS-CoV-2 while monitoring the states of mind, allow to maximize the capacity of the services without compromising on the quality-of-service provision.

Objectives: To present and describe a digital platform that is being developed to monitor Covid-19 patients and their mental health status at different points of the infection, from diagnosis to recovery.

Methods: A set of sensors, coupled with a small low-cost device, is used to acquire biometric data according to different profiles. The device is connected wirelessly to a patient’s smartphone, which transfers the acquired data to a central platform. Doctors can remotely access the data to assess the patient’s condition and make decisions. The application running on the patient’s smartphone can generate alerts (such as medication time) and alarms in case of dangerous biometric signals. In the case of Covid-19, the monitored parameters include blood pressure, heart rate, weight, body temperature, peripheral oxygen saturation, blood glucose, and the respiratory cycle. Validated psychiatric scoring tools are also used (the Montgomery-Asberg Depression Rating Scale, the Pittsburgh Sleep Quality Index, the Insomnia Severity Scale, and the World Health Organization Quality of Life - BREF).

Results: In this work, we would like to provide some preliminary data related to the impact of SARS-CoV-2 on the mental health of individuals infected during the course of the disease. We will describe the signs and symptoms of the virus, highlighting its relevance in changing the infected person’s mental health status. Through the use of the digital platform, we hope to guarantee the quality of health services, proactively and continuously, following the fluctuations in the conditions of each patient, and contribute to the Proximity of Health, through the easy access between the patient and the provider of health.

Conclusion: Healthcare services are facing a dramatic change in demand related to the effects of COVID-19. Scarce resources have mandated maximal operational efficiency and productivity to ensure timely patient access to best-suited treatment. Many hospitals have already telemedicine and launched hotlines to provide some help to people in need. Digital solutions that allow a double control of the state of organic and mental health can benefit the long-term economic, social and clinical results. The translation of therapeutic strategies that improve coping responses to stress following the needs of infected patients, contributes to the relief of related signs and symptoms. Apart from the Covid pandemic, distant mood follow-up monitoring promises a lot of others benefits.

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P.0207
Validation of techph questionnaire in mild cognitive impairment population in Spain

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Introduction: Development of assessment tools and instruments for evaluating older persons’ technology adoption and usage as well as measuring the effects of the interventions are of high priority.

The aim of this study is to validate TechPH questionnaire in Spanish population suffering from mild cognitive impairment.

Methods: A sample of 364 Spanish patients with mild dementia were enrolled. These were inclusion criteria: patients with 55 years of age or older, being diagnosed of mild dementia with a Mini Mental score between 20 and 28 points, living independently, having an informal carer and being in charge of their own medication. Exclusion criteria were: severe depression, measured by Geriatric Depression Scale with scores more than 11 points, terminal illness or blindness.

229 patients were women (59%). The sample age ranged from 55 to 90 years (M = 73.31, SD = 7.52). Mini Mental Score mean was 25.56 (SD = 2.30). Majority of participants were married (64%), lived with their spouse (58%) and had an elementary education (72%).

Measures: TechPH is a self-reported scale designed to measure attitudes and enthusiasm for technology in older people. The original questionnaire had two factors: techEnthusiasm and techAnxiety, and a global score called technophilia. Technophilia is defined as a general quality for any individual’s relationship to technology that could poten-