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Results: A total of 317 HCP completed the survey. The majority were French (90%), in 35–50 years old (36%) and in 50–65 (27%). Pharmacists accounted for 42% of respondents, clinical physicians 39%, students in health science 13% and others 6%. They worked in hospitals (59%) or private office (40%). They had wifi at work (89%), with unlimited access for most of them (96%). 86% of them used at least one internet app per day. Most of them (85%) never looked for a clinical toxicology app. However, 67% of them thought that it would be helpful and 26% that it may help them for their everyday work. 20% of the HCP had never received any training in toxicology, 70% had a few lessons during their studies. When facing intoxication cases, the HCP would call the poison information center (65%), search for guidelines (42%), look on official health agencies websites (34%), and call emergency services (20%). One-third of the HCP used a single source of information. HCP agreed on the importance of an e-learning app and their expectations regarding its content and utility of this were classified as follows, on a 10 point scale: obtaining an answer quickly while facing poisoning cases (8), finding the information required as fast as possible (8), recognizing the common syndromes (8), assessing the seriousness (8), knowing the routine dosage and their interpretation (7) and managing the case on their own (7). One-third of the respondents did not want to pay for a clinical toxicology app (35%) and more than one-third accepted to pay only if it includes certified training for continuing medical education (40%). In this case, 24% of respondents agreed to pay more for the app (>€20). HCP under 25 years old were more interested in continuing medical education than the older HCPs (67% vs 28%). Our survey was subject to non-response bias. Our survey does not reflect the opinion of all HCP in France due to moderate sample size, but suggested the need for extending online educational tool and for recognizing training.

P09-07

COVID-19, health recovery by medicinal plants (health solutions): An overview

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Purpose: Coronavirus disease became a pandemic in 2019; and according to WHO, has not been recommended drug for its definitive treatment^[1]. Some drugs used for control of this pandemic including Lopinavir; Ritonavir, Tocilizumab, Azithromycin, Remdesivir, Chloroquine and Hydroxychloroquine may have the potential benefits, but the clinical data do not yet fully confirm these medications^[2]. And they have potential for inducing overt toxicities.

Methods: Since the Plants with high potential from secondary metabolites and compounds such as phenolic compounds, flavonoids, alkaloids^[3–5], may be able to help and improve the recovery of patients, therefore in this study we reviewed the properties of 12 herbal extracts or infusions among 50 plant species which could have improved recovery quality in COVID-19 affected patients. The method of plant selection was based on past studies, active ingredients and therapeutical properties on viruses^[6–12].

Results: Our results showed *Thymus vulgaris* L., *Hyssopus officinalis* L., *Mentha pulegium* L. and *Mentha piperita* L. from Lamiaceae family and *Ziziphus jujuba* (Rhamnaceae), *Althea officinalis*, *Malva sylvestris* L. from Malvaceae and *Viola odorata* L. (Violaceae), *Echinacea purpurea* and *Matricaria chamomilla* L. from Asteraceae, *Verbascum*

thapsus L. (Scrophulariaceae) and *Daucus carota* (Apiaceae) have capability to improve the recovery in COVID-19 affected patients.

Conclusion: The presence of terpenoids, flavonoids and the rich amounts of phenolic compounds which have anti-inflammatory effects and also up regulation of immune system are among major agents that; they can help in recovery improvement of these patients.

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P10 – Developmental neurotoxicology

P10-01

This abstract has been withdrawn.

P10-02

Perinatal exposure to diesel exhaust origin secondary organic aerosol causes autism-like behavior in rats

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Background and Aims: Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by impaired social communication, social interactions and repetitive behaviors. The etiology of autism remains unknown and its molecular basis is not well understood. Both genetic and environmental factors may contribute ASD. In this study, we used diesel exhaust origin secondary organic aerosol (DE-SOA) as environmental pollutants. The aim of present study