



MAUDSLEY LEARNING WEBINAR SERIES: The Psychiatry of Pandemics

Webinar 4: Immunopsychiatry: Infections, Inflammation and the link with Mental Health - Q&A

19th May 2020

Speaker panel:

- Dr Sotiris Posporelis
- Professor Michael Eriksen Benros

To watch the webinar recording, [click here](#).

Share your thoughts via twitter and join the conversation by including [#psychiatryofpandemics](#) [@maudsleylearn](#) [@ConsultantConn](#) in your posts!

Question 1: In the studies where they found that immune-modulating drugs improved depressive symptoms in patients with conditions that those drugs were treating, how did they know that improvement in depression symptoms wasn't related to improvement in the original physical condition?

Answer:

(Professor Michael Eriksen Benros):

Excellent point and it is indeed difficult to disentangle. The studies tried to adjust for the improvement in the original physical condition, where for instance the study by Iyengar et al. used the WOMAC scale, which estimate osteoarthritis disease activity, including pain, stiffness and physical functioning of joints. Nonetheless, it cannot be ruled out to have an impact. However, our meta-analysis also showed an antidepressant effect of anti-inflammatory drugs as add-on to antidepressants in patients with MDD without significant known medical comorbidity (SMD= -0.64; 95% CI= -0.88 to -0.40; N=597; I²= 51%), showing larger effect sizes than for depressive symptoms in the RCT's with anti-inflammatory monotherapy in patients with general medical conditions (SMD= -0.41; 95%CI= -0.60 to -0.22; N=8,825; I²= 93%). Nonetheless, we still need to interpret these studies with caution particularly for potential MDD indication as larger well conducted studies are still needed preferentially based on immune markers.



Question 2: Do you think that the psychiatric sequelae of COVID are different to general inflammatory/infection conditions, or is it just that we're paying more attention to it? Or is there something different about how COVID seems to be affecting patients?

Answer:

(Professor Michael Eriksen Benros):

At this point it is a bit speculative to answer. SARS-CoV-2 has neurotropic potential and can affect the brain directly, but most symptomatology will likely relate to the severity of the disease and immune responses induced by the SARS-CoV-2. The potential psychiatric sequelae will likely be comparable to a similar person with a just as severe condition and length of hospital stay or intensive care as a comparable person with a similar course caused by another severe infection. But it is something we will follow carefully and as a new virus to humans it is more likely to induce this severe pattern of disease, which also increases the risk of psychiatric sequelae for those severely affected.

Question 3: Could you please share two papers, COVID and effects on cognition? Especially after ventilation.

Answer:

(Professor Michael Eriksen Benros):

This is our recent systematic review that will soon be online on the COVID-19 pandemic and mental health consequences:

Vindegaard N, Benros ME. COVID-19 pandemic and mental health consequences: systematic review of the current evidence. *Brain, Behavior and Immunity*. 2020 [In press]

Question 4: Could there also be a cumulative effect of infections across time, especially during brain development?

Answer:

(Professor Michael Eriksen Benros):

Potentially yes – as the immune system is also involved in brain development. We have shown in register study that the number of prior infections increases the risk in a dose-response association, but the underlying potential mechanisms needs to be elucidated.

Question 5: Please can you shed some light on the notion of the link between Vid D deficiency and immunodeficiency? This has been mentioned in relation to vulnerability to COVID-19.

Answer:

(Professor Michael Eriksen Benros): The more risk factors one has toward immunodeficiency, such as chronic diseases, substance abuse, vitamin deficiency etc, the vulnerability towards acquiring infections and sickness caused by the infection is likely to increase.



Question 6: What is the effect of COVID-19 pandemic to the treatment of patients with mental health problems?

Answer:

(Professor Michael Eriksen Benros): There are potentially many depending on the set-up available for the patient. There have been described a worsening of symptoms overall as for the general public; however, some actually also for a period at least have had improvement of symptoms, since they might now feel more as in the same boat as everyone else. But overall, there seem to be a worsening since regular contact with family, clinicians and friends are interrupted, even though telepsychiatric interventions are now offered many places.

Question 7: Should people be screened simultaneously for depression and infection?

Answer:

(Professor Michael Eriksen Benros): At new onset of depression people should first be screened for potential identifiable causes, with a screening blood test and physical examination, to rule out infections/inflammatory conditions, hormone alterations, signs of cancer etc. so a physical check up by the general practitioner or psychiatrist should be included.

Question 8: Is there a possible relationship between Vit D, immunosuppression and vulnerability to infectivity from COVID-19?

Answer:

(Professor Michael Eriksen Benros): Please see answer to question 5.

Book your place to the last webinar of the series or access webinar recordings:

E: webinars@consultantconnect.org.uk | W: consultantconnect.org.uk/webinars