

COVID-19 Taskforce Monthly Statement

May 2022

Since its inception, NNEdPro's COVID-19 Taskforce has worked to improve health during the COVID-19 pandemic, by focusing on nutrition research, clinical practice and public health. As a global organisation, our dedicated microsites contain a repository of generic and region specific public health resources to highlight up-to-date policy and practice across our regional networks(1). Additionally, the taskforce has identified areas for research and evidence synthesis relating to the nutritional aspects of COVID-19 prevention and treatment, including issues of food and nutrition security (2). Our aim has been to coordinate and share resources with NNEdPro's global and regional networks, and the public, to highlight key challenges, policy updates and best guidance on good nutrition and health practices in the context of COVID-19.

Each month the NNEdPro COVID-19 microsites are updated with new resources related to both public health and nutrition in the context of the COVID-19 pandemic. These evidence collections are linked closely with our research focussed '[Evidence Tracker](#)' as well as the [International Knowledge Application Network Hub in Nutrition \(iKANN\)](#).

Alongside this, we will endeavour to produce a monthly statement reflecting on these updates to the evidence base as well as inviting thoughts from taskforce members involved in these areas of work.

Public Health Updates

The UK Health Security Agency have released a rapid evidence briefing titled 'The effectiveness of vaccination against long COVID'(3). The review found that people who had been fully vaccinated against covid-19 were around half as likely to develop long covid symptoms as people who had received only one vaccine dose or were unvaccinated. This research is key to both COVID-19 vaccine and long-covid research, and describes the possible long term effects of the disease. Long covid research continues with the BMJ publishing a research paper investigating the development and validation of the symptom burden questionnaire for long covid (SBQ-LC), and a letter questioning whether we are mislabelling long covid in children and adolescents (4,5). The UK Health and Safety Executive has also updated their advice for workplaces by replacing their COVID-19 guidance for workplaces with public health guidance(6). This advice supports the UK government's move towards living with COVID-19.

Vaccine uptake has similarly been a topic of interest this month in other nations. The Indian ministry of health and family welfare have also released updated guidelines for COVID-19 vaccination of children between 12-14 years(7). The Africa CDC have published a 'Report of the High-Level Ministerial Meeting: Partnerships to Accelerate COVID-19 Vaccination in Africa', in an attempt to increase vaccine uptake in the continent(8). Research and government guidelines on COVID-19 vaccines and long covid remain prominent and will be key to global recovery from the pandemic.

Nutrition Updates

April has seen further useful additions to the literature related to COVID-19 and nutritional status.

The potential immunomodulatory and antiviral effects of micronutrients and additional nutritional factors such as bioactive compounds have garnered significant interest during the course of the pandemic. To date, mechanistic hypotheses have been challenging to translate into direct clinical evidence of effect on outcomes. A recent review by Tomas et al (9) explores the potential mechanisms of action for multiple bioactive compounds as well as published findings on their effectiveness against various coronaviruses. On this topic, a recently published observational cohort study has examined the implications of micronutrient deficiencies in practice (10). This study identified an association between various and multiple micronutrient deficiencies with more severe COVID-19 course and outcomes. These findings come with the caveat that plasma micronutrient concentrations must be interpreted with caution, given there is consistent evidence that most commonly measured micronutrients in the plasma are significantly lowered as part of the systemic inflammatory (11). This makes it difficult to disentangle whether micronutrient deficiencies are a predisposing factor for this more severe disease course, or if the presence of infection itself contributes to deficiencies due to a combination of infection driven tissue redistribution, lowered intake and/or higher requirements.

A new paper from Italy examines the impact of lockdown on the pre-operative care program of a cohort of bariatric surgery patients, citing negative effects resulting in the postponement of surgery (12). An additional paper published in the Journal of Human Nutrition and Dietetics reflects on learnings from a UK survey of dietitians relating to nutritional care pathways for patients with COVID-19 prior to and post-hospital stay (13). This research will contribute to informing rehabilitation pathways and optimise recovery and reduce the likelihood of further malnutrition in this patient group.

In the area of clinical nutrition, recently published articles include a large observational cohort study of a US ICU patient database, demonstrating the benefits of early enteral nutrition on shorter time on mechanical ventilation, shorter ICU and hospital LOS, and decreased costs (14). A separate observational study assessed the effects of gastrointestinal dysfunction/symptoms on nutrition delivery in critically ill COVID-19 patients (15). These distinct but related papers outline the importance of promoting nutrition support in the face of well documented challenges in this patient population.

Taskforce Statement

The NNEdPro Nutrition and COVID-19 task force is collaborating with the STIMULATE-ICP trial team, which is a UK multicentre Long COVID clinical trial. They are currently running a Delphi study and are seeking responses from patients and healthcare professionals with experience of Long COVID and/or other chronic conditions. The survey plus more information can be found via the following link: <https://www.stimulate-icp.org/delphi-project>

Otherwise, time in this month's meeting was dedicated to discussing potential collaborations and funding opportunities for future research, and preparing for some key events in the research and education calendar for 2022. These include:

The NNEdPro Summer Summit, Empowering Global Nutrition with Digital Technology, with the main day confirmed for 23rd July 2022, and the COVID taskforce-related satellite event in the preceding week.

The IUNS International Congress on Nutrition in Tokyo, December 2022, at which the task force have been invited to host a symposium.

These are fantastic opportunities to showcase the work of the task force, make an impact on the international stage, and stimulate further collaborations.

References

1. COVID-19: Useful Resources: <https://www.nnedpro.org.uk/coronavirus>
2. COVID-19: Nutrition Resources: <https://www.nnedpro.org.uk/covid-19nutrition-resources>
3. UK Health Security Agency: The effectiveness of vaccination against long COVID: <https://ukhsa.koha-ptfs.co.uk/cgi-bin/koha/opac-retrieve-file.pl?id=fe4f10cd3cd509fe045ad4f72ae0dfff>
4. Development and validation of the symptom burden questionnaire for long covid (SBQ-LC): Rasch analysis: <https://www.bmj.com/content/377/bmj-2022-070230>
5. Are we mislabelling long covid in children and adolescents? : <https://www.bmj.com/content/376/bmj.o705>
6. Health and Safety Executive: Advice for workplaces: <https://www.hse.gov.uk/coronavirus/index.htm#advice>
7. Indian MoHFW; Guidelines for Covid-19 Vaccination of Children Between 12-14 Years of Age: <https://www.mohfw.gov.in/pdf/GuidelinesCovidvaccination12to14yrchildrenMarch2022.pdf>
8. Africa CDC; Report of the High-Level Ministerial Meeting | Partnerships to Accelerate COVID-19 Vaccination in Africa: <https://africacdc.org/download/report-of-the-high-level-ministerial-meetingpartnerships-to-accelerate-covid-19-vaccination-in-africa/>
9. The direct and indirect effects of bioactive compounds against coronavirus
10. <https://pubmed.ncbi.nlm.nih.gov/35462942/>
11. Prevalence of Micronutrient Deficiencies in Patients Hospitalized with COVID-19: An Observational Cohort Study
12. <https://www.mdpi.com/2072-6643/14/9/1862/htm>
13. Relationship between nutritional status and the systemic inflammatory response: micronutrients
14. <https://pubmed.ncbi.nlm.nih.gov/30220267/>
15. Impact of SARS-CoV-2 Lockdown on the Preoperative Care Program of Patients Scheduled for Bariatric Surgery
16. <https://www.mdpi.com/2072-6643/14/7/1488>
17. A UK survey of nutritional care pathways for patients with COVID-19 prior to and post-hospital stay
18. <https://onlinelibrary.wiley.com/doi/10.1111/jhn.12896>
19. Role of Early Enteral Nutrition in Mechanically Ventilated COVID-19 Patients
20. <https://pubmed.ncbi.nlm.nih.gov/35464756/>
21. Nutritional intake and gastro-intestinal symptoms in critically ill COVID-19 patients
22. [https://www.clinicalnutritionjournal.com/article/S0261-5614\(22\)00112-1/fulltext](https://www.clinicalnutritionjournal.com/article/S0261-5614(22)00112-1/fulltext)