The perspectives of infectious diseases physicians and clinical microbiologists currently engaged in the response to COVID-19

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Infectious diseases (ID) physicians and microbiologists are pivotal in guiding the response to the COVID-19 pandemic, ranging from managing cases and coordinating local responses to establishing timely and accurate diagnostic testing(1, 2). We conducted a survey of ID physicians and microbiologists in Australia and New Zealand in early March to assess the impact on workload and the perspectives of ID physicians in the pre-pandemic period. Responses were received from 214/600 (35.6%) ID physicians and 55/310 (17.7%) practicing microbiologists. During February, ID physicians spent a median of 27 hours (IQR 17-50hrs) on COVID-19 related activities. Microbiologists worked a median of 8 hours (IQR 2.5-8 hrs) overtime per week and nearly one third of ID physicians (70/214) worked late at least three days a week on COVID-related activities. While many doctors have been less busy than usual lately(3), ID physicians and microbiologists have been busier than ever.

At the time of the survey, only 45% (95/212) of ID physicians agreed that the government's response was well coordinated. Similarly, only 25% (11/42) of microbiologists felt that advice from laboratory regulatory bodies was of assistance. This feedback highlights the confusion and lack of clarity that many clinicians experienced at the beginning of the pandemic. To improve coordination and response, we advocate for the establishment of a national Centre for Disease Prevention and Control(4). This would need to be supported politically and financially by the federal government and all jurisdictions to be effective.

Reflecting the current lack of clear data about therapeutic options for COVID patients, over three quarters (169, 79%) of ID physicians felt they had equipoise for a clinical trial of specific antiretroviral. We advocate for investigational agents for COVID-19 to only be used in the context of a clinical trial (5). At this time of great challenge to the Australian and New Zealand health care systems ID physicians and microbiologists stand with all health care professionals and members of the community: we've got your backs.

References:

- 1. Bearman G, Pryor R, Vokes R, Cooper K, Doll M, Godbout EJ, et al. Reflections on the COVID-19 pandemic in the USA: Will we be better prepared next time? International journal of infectious diseases: IJID: official publication of the International Society for Infectious Diseases. 2020;96:610-3.
- 2. Foley M, O'Neill I, O'Neill B, Humphreys H, Burns K, de Barra E, et al. From bench to bedside—development of an integrated COVID-19 patient flow management system. Journal of Hospital Infection. 2020.
- 3. Scott A. How are Australia's doctors faring during COVID-19?: University of Meblourne; 2020 [Available from: https://pursuit.unimelb.edu.au/articles/how-are-australia-s-doctors-faring-during-covid-19.
- 4. Australian Medical Association. Australian National Centre for Disease Control (CDC) 2017 2017 [Available from: https://ama.com.au/position-statement/australian-national-centre-disease-control-cdc-2017.
- 5. Denholm JT, Davis J, Paterson D, Roberts J, Morpeth S, Snelling T, et al. The Australasian COVID-19 Trial (ASCOT) to assess clinical outcomes in hospitalised patients with SARS-CoV-2 infection (COVID-19) treated with lopinavir/ritonavir and/or hydroxychloroquine compared to standard of care: A structured summary of a study protocol for a randomised controlled trial. Trials. 2020;21(1):646.