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COVID-19 Lockdown Effects on Research in Melbourne



- May 13, 2021



Australia has been relatively lucky in the current pandemic because, to date, we have managed to eliminate community transmissions of COVID. We did, however, experience significant community transmission in Melbourne (and some other parts of Australia) in 2020. The people of Melbourne (a city of approximately 5 million people) were subjected to strict lockdowns that has, fortunately, been successful. I have been asked to give a first-hand account of the local situation and the impact on researchers in Melbourne.

Our first lockdown commenced on 24th March. Social distancing measures were put in place everywhere. We were permitted to leave our homes for 2 hours daily for exercise and shopping, although it was advised to limit shopping and preferably only have one household member do the shopping.

Our second, harsh lockdown commenced on 9th July and continued through the end of October. We were allowed one hour of exercise outside per day (restricted to a 5km limit) and only one household member was permitted to go shopping for essential items. Masks became mandatory. An official work permit was issued, specifying the days and hours each employee was allowed to attend the workplace, these were randomly inspected by police. We were not permitted to meet with any people who were not members of our household during this entire period. An exception was given to people of single households, who were able to nominate a “bubble buddy” to meet with; however, this occurred only later in the lockdown period.

In late November our restrictions eased a little, and we were able to see other people who were not household members, although these visits had to be outside with all people wearing masks. By December we were able to have house visits with limited numbers of people.

The impact of COVID-19 on research in Melbourne

In mid-March 2020 the incidence of COVID community transmissions in Melbourne had started to increase. I was aware of how COVID was affecting other countries via correspondence with colleagues in the USA and UK. I began to prepare my team to work from home, anticipating that we would likely follow the same scenario. We reduced our animal breeders significantly to reduce the workload for the animal house staff and minimize mice that we would not be able to use. By late March our State Government had instructed us to work from home where possible and we ended up doing this for the majority of 2020. For the entire month of April we worked only from home. We followed the advice that I wrote for a working from home Blog for ISEH last year (<http://www.simplyblood.org/2020/05/covid-19-series-working-from-home.html>). We reassigned any experiments that had already been commenced with live mice to an older cohort of the same genotype, thankfully approved on our animal ethics protocol, saving a major loss.

The impact on many researchers in Melbourne has been profound, especially those who require wet lab experiments. Researchers based at Melbourne Universities were not able to go back to their campus for the majority of 2020 and had to work from home. We were fortunate because my workplace (a medical research institute) did permit some essential research to continue during the COVID lockdowns. My lab members and myself continued to work from home for most of 2020. We were permitted to occasionally go to the lab for essential experiments. This amounted to approximately one day per week from May, although during the second lockdown we all remained at home again until the community transmission started falling significantly.

Fortunately my lab functioned very well during the COVID lockdowns and I am very proud of every one of them for how well they handled the challenges and stress. Every day we touched base via the Teams app to check in on each other and briefly mentioned what we were working on that day. Twice a week we had virtual meetings via Teams where we caught up in more detail to discuss projects, data analysis and informal journal clubs. To make the virtual meetings more fun, one team member had to nominate a

question that we all had to answer at the next meeting. We also made sure that everyone was feeling OK. This was the most important part of every meeting.

Inevitably, some projects in my lab were put on hold for the entire year due to time required and the risk of early termination. We were fortunate to have enough data from the other projects that could continue and other data that we had already acquired prior to the lockdowns that we could analyse from home. We also had the software and equipment that we required for the analyses at home (at times we were co-ordinating our two FlowJo dongles between three users on a weekly basis!). And we had some grants and manuscripts to write (including an invited review and revisions for a manuscript that was recently accepted for publication).

Schooling remotely and its effects on parents

I cannot write this without acknowledging that many parents (particularly mothers, but many fathers too) who had school-aged children who were young or had special needs had it much tougher due to the extensive periods of schooling remotely in 2020. While this is also a common scenario in many countries, it did significantly affect people in Melbourne.

During the first lockdown, school holidays were brought forward by one week (our boys were thrilled to get three weeks of leave!). In April all students commenced 2nd term remotely schooling from home. In late May, restrictions eased a little and the primary school students went back to school in early June. Community transmissions started rising again after one month so the children returned to remote schooling and remained at home until mid-October.

I was very fortunate that my sons were old enough and did not require much assistance during their remote schooling period (which was the majority of one full school year). I am also very lucky that my husband (Carl Walkley, also a member of ISEH) is very much an equal partner in the care of our sons. I know that many other parents were not so lucky and had a much tougher time, with some being unable to make much progress in their work in 2020. I am sure that many in other countries are continuing to experience this situation now. All I can do is offer encouragement- you will get through this and you and your families and friends will be fine.

The effects of COVID-19 on funding for researchers

The Australian funding system is very different from that in many other countries. We do not have tenure in Australia, many of us fund our salaries and all consumables entirely from peer-reviewed grants. We have one round of our primary grant funding sources each year (and each grant is usually for three years, with few up to five years of funding). The current success rate for biomedical researchers is less than 10% nationally and had been declining over the last decade. Other researchers who are employed by

Universities (as opposed to being based at medical research institutes) do get some funding support from the University. Unfortunately, however, the University funding was significantly affected in 2020 and in 2021 due to the loss of international students. Philanthropy support has also dropped due to the pandemic. At a recent function I attended, the Mayor of Melbourne stated that the Melbourne economy took a \$20 billion hit in 2020 due to COVID. This will likely affect local philanthropy support of research for years to come. The effects of COVID on biomedical researchers in Australia will likely continue for a long time; many outstanding researchers have already had to leave academia. We all hope that the situation improves soon.

A “new normal” post-COVID-19

At the time of writing this blog post we are in a “new normal”. Masks are no longer mandatory except on public transport. Hotel quarantine was put on hold in Melbourne after the outbreak earlier this year, but recently recommenced in Melbourne and cases of COVID from returned travellers are rising again. Vaccinations have started but are slow in rolling out and it will take a long time to vaccinate the majority of Australian residents. Our Government recently predicted that the restrictions on international travel for residents in Australia will not be eased until at least mid-2022. While the risk of community transmission due to hotel quarantine outbreaks still threatens, we have had some temporary lockdowns in Australia (including a 5 day lockdown in mid-February in Melbourne) that have managed to contain the outbreaks. Hopefully we will continue to do so.

We have made some changes to our work schedule directly as a result of the COVID lockdowns. Working from home more often has become common for many of us. Carl and I have adjusted our schedules to spend part of our day at the workplace, then continue to work at home after picking our boys up from school. This new schedule has been very much appreciated by our dog, who loves having us home more often and was not overly keen when we started working and schooling away from home post-lockdowns! It remains unclear as to whether or not we will adapt mask wearing more often, such as during flu season.

While our Melbourne lockdowns were tough (and at times very stressful), we have also been fortunate. Many of you who are in countries that have been more severely affected by COVID. I have been thinking of you all, I cannot even start to imagine what it has been like for you all. Stay strong and stay as happy and healthy as you can. I can reassure you that there is a light at the end of the tunnel, and it is getting brighter.

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