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То:	Community Support and Services Committee
Subject:	Opposed to extending public health order - submission
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Attachments:	Transmissibility-of-SARS-CoV-2-among-fully-vaccinated-individuals.pdf

Deaths due to COVID-19 in Australia

The Coronavirus Disease 2019 (COVID-19) is a respiratory infection caused by a new coronavirus. On 11 March 2020 the World Health Organization (WHO) declared COVID-19 to be a pandemic.

There are 2,639 death registrations that have been received by the ABS where an individual is certified as having died from or with COVID-19 between the start of the pandemic and 31 January 2022.

As outlined on the Australian Bureau of Statistics on the 4th of March 2022, the statistics relating to Covid 19 deaths is not of a high number for 2 year year pandemic where it was projected from media and government that will die.

Of these numbers, the statistics are still referring to dying of or with, there is a great difference between those words.

Initially when the pandemic began, it could have been justified to have extreme restrictions, however as time has passed and all are learning, these restrictions and mandates are now not necessary to continue.

The vaccine was originally promised by the head Americans involved and oyr governments that it would prevent transmission and we all had to get vaccinated to protect others, however as time has gone on and variants have been identified it is clear ear to see that having vaccinations has not prevented transmission at all. Advertising, promotion, coercion, pressure still continues to encourage and demand all to be vaccinated even though the vaccine is not a preventative measure for transmission.

Workplaces and families have still been heavily affected by staff affected (mildly or grossly) by Covid even though all persons were vaccinated.

Being that we are told on a daily basis that the covid pandemic has peaked in qld, school return was delayed and children were encouraged to be vaccinated for school, this has too made no difference to the spread of the virus.

In looking at the daily statistics supplied by qld health, cases are still occurring whether people are vaccinated, wearing masks, if they are not vaccinated or not wearing masks... It seems that the extreme control measures at this stage are far from purposeful in preventing transmissions. With the variants nit being as dangerous as

what originally believed, I do not believe there is an emergency anymore.

Australia and Qld need to now start repairing the damage that this pandemic and restrictions have done to our country and state.

Many families and businesses have been affected emotionally, physically, financially and mentally.

It is time now to start rebuilding our local communities, hospitals, schools, police force, ambulance, teachers and so on.

I dont believe that stopping people from working or being social in the community has been of any medical benefit but rather of control and punishment.

I know of many people across many fields of employment that purely consented to this trial vaccine so they could see family interstate or retain employment.

Some suffered terribly from the vaccines to keep employment, and have suffered more than if they contracted covid.

When a vaccine has a risk of being more dangerous to a healthy person that the actual vurus, we need rethink and reassess all the risks involved, just as most do in a normal risk assessment in workplaces.

With COVID cases (& especially deaths) lower than anticipated, i need to question how the government wants to continue gaving a State of emergency and how can oyr state government justify that we are still in a state of emergency?

Information is being released from the uk on a regular basis that the restrictions and mandates were not effective, attached is a further report outlining that vaccination has no bearing on transmission of covid.

These restrictions and mandates need to stoo, therefore the state of emergency needs to stop.

I do not support the extension of Public Health and Other Legislation Amendment Bill 2022.

For your attention and respectfully consideration.

Megan Faulks

Correspondence

Transmissibility of SARS-CoV-2 among fully vaccinated individuals

Vaccine effectiveness studies have conclusively demonstrated the benefit of COVID-19 vaccines in reducing individual symptomatic and severe disease, resulting in reduced hospitalisations and intensive care unit admissions.1 However, the impact of vaccination on transmissibility of SARS-CoV-2 needs to be elucidated. A prospective cohort study in the UK by Anika Singanayagam and colleagues² regarding community transmission of SARS-CoV-2 among unvaccinated and vaccinated individuals provides important information that needs to be considered in reassessing vaccination policies. This study showed that the impact of vaccination on community transmission of circulating variants of SARS-CoV-2 appeared to be not significantly different from the impact among unvaccinated people.^{2,3} The scientific rationale for mandatory vaccination in the USA relies on the premise that vaccination prevents transmission to others, resulting in a "pandemic of the unvaccinated".4 Yet, the demonstration of COVID-19 breakthrough infections among fully vaccinated health-care workers (HCW) in Israel, who in turn may transmit this infection to their patients,5 requires a reassessment of compulsory vaccination policies leading to the job dismissal of unvaccinated HCW in the USA. Indeed, there is growing evidence that peak viral titres in the upper airways of the lungs and culturable virus are similar in vaccinated and unvaccinated individuals.^{2,3,5-7} A recent investigation by the US Centers for Disease Control and Prevention of an outbreak of COVID-19 in a prison in Texas showed the equal presence of infectious virus in the nasopharynx of vaccinated and unvaccinated individuals.6 Similarly, researchers in California observed no major differences between vaccinated and unvaccinated individuals in

terms of SARS-CoV-2 viral loads in the nasopharynx, even in those with proven asymptomatic infection.⁷Thus, the current evidence suggests that current mandatory vaccination policies might need to be reconsidered, and that vaccination status should not replace mitigation practices such as mask wearing, physical distancing, and contact-tracing investigations, even within highly vaccinated populations. Ideclare no competing interests.

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- Thompson MG, Stenehjem E, Grannis S, et al. Effectiveness of COVID-19 vaccines in ambulatory and inpatient care settings. N Engl J Med 2021; 385: 1355–71.
- 2 Singanayaman A, Hakki S, Dunning J, et al. Community transmission and viral load kinetics of the SARS-CoV-2 delta (B.1.617.2) variant in vaccinated and unvaccinated individuals in the UK: a prospective, longitudinal, cohort study. Lancet Infect Dis 2021; published online Oct 29. https://doi. org/10.1016/S1473-3099(21)00648-4.
- 3 Wilder-Smith A. What is the vaccine effect on reducing transmission in the context of the SARS-CoV-2 delta variant? *Lancet Infect Dis* 2021; published online Oct 29. https://doi/ org/10.1016/S1473-3099(21)00690-3.
- 4 Tayag Y. Stop calling it a pandemic of the unvaccinated. The Atlantic. Sept 21, 2021. https://www.theatlantic.com/ideas/ archive/2021/09/persuade-unvaccinatedprotect-unvaccinated/620091/ (accessed Sept 30, 2021).
- 5 Bergwerk M, Gonen T, Lustig Y, et al. COVID-19 breakthrough infections in vaccinated health care workers. N Engl J Med 2021; 385: 1474-84.
- 6 Hagan LM, McCormick DW, Lee C, et al. Outbreak of SARS-CoV-2 B.1.617.2 (delta) variant infections among incarcerated persons in a federal prison—Texas, July–August 2021. MMWR Morb Mortal Wkly Rep 2021; 70: 1349–54.
- 7 Acharya CB, Schrom J, Mitchell AM, et al. No significant difference in viral load between vaccinated and unvaccinated, asymptomatic and symptomatic groups infected with SARS-CoV-2 delta variant. *medRvix* 2021; published online Sept 29. https://doi. org/10.1101/2021.09.28.21264262 (preprint).

With interest we read the paper by Anika Singanayagam and colleagues¹ assessing the secondary attack rate (SAR) of SARS-CoV-2 in 204 vaccinated and unvaccinated household contacts exposed to 138 vaccinated and unvaccinated index cases. Here, we want to point out the importance of adjusting for age when comparing vaccinated and unvaccinated individuals.

The authors report a similar SAR among household contacts exposed to fully vaccinated and unvaccinated index cases (25% and 23%). Although not explicitly stated by the authors, this finding hints towards no effect of vaccination on transmission and was reported as such by the media in the UK and the Netherlands-and possibly other countries.^{2,3} However, age is a confounding factor in this observation if age is associated with both vaccination status and the risk of transmitting SARS-CoV-2. Indeed, the study indicates a higher peak viral load with increasing age, consistent with lower infectiousness in children. In addition, although the age distribution of all included index cases and contacts is not presented, table S2 in the appendix to the Article provides data for a subset of participants testing positive for SARS-CoV-2, showing that a large proportion (78%) of unvaccinated participants were younger than 18 years, whereas none of the vaccinated participants were. These findings together suggest that the infectiousness of the included unvaccinated index cases was lower than that of the included vaccinated participants because of younger age. Therefore, the presumed lack of vaccine effect on transmission might be largely due to confounding by age, which the authors did not address. In our analysis of vaccine effectiveness against transmission in the Netherlands, adjustment for age of index cases and contacts indeed had a large effect on vaccine effectiveness estimates.4 Therefore, vaccine effectiveness against transmission reported by Singanayagam and colleagues is probably an underestimate.

Also, the reported vaccine effectiveness against SARS-CoV-2 infection (34%) is likely confounded by age, as vaccination status is associated with age, and younger age is associated with reduced susceptibility to acquiring SARS-CoV-2 infection.⁵

In these times, when evidencebased confidence in vaccines is crucial to reduce the impact of the COVID-19 pandemic on mortality and morbidity, data on effects of vaccination should be adequately and unambiguously reported by the scientific community in order to avoid misinterpretation of the data by the public and the media.

We declare no competing interests.

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- Singanayagam A, Hakki S, Dunning J, et al. Community transmission and viral load kinetics of the SARS-CoV-2 delta (B.1.617.2) variant in vaccinated and unvaccinated individuals in the UK: a prospective, longitudinal, cohort study. Lancet Infect Dis 2021; published online Oct 29. https://doi. org/10.1016/S1473-3099(21)00648-4.
- 2 Roberts M. Covid: double vaccinated can still spread virus at home. Oct 29, 2021. https://www.bbc.com/news/ health-59077036 (accessed Oct 30. 2021).
- 3 @RTLnieuws. Oct 28, 2021. https://twitter.com/ RTLnieuws/status/1453806095693225984 (accessed Oct 30, 2021).
- 4 de Gier B, Andeweg S, Backer JA, et al. Vaccine effectiveness against SARS-CoV-2 transmission to household contacts during dominance of delta variant (B.1.617.2), August-September 2021, the Netherlands. Euro Survell 2021; 26: 2100977.
- 5 Viner RM, Mytton OT, Bonell C, et al. Susceptibility to SARS-CoV-2 infection among children and adolescents compared with adults: a systematic review and meta-analysis. JAMA Pediatr 2021; 175: 143–56.

The important analysis by Anika Singanayagam and colleagues¹ demonstrated that individuals fully vaccinated against SARS-CoV-2 with breakthrough infections have similar peak viral loads to unvaccinated people and might infect other fully vaccinated individuals within the same household. Of particular concern, vaccines that permit transmission do not confer sterilising immunity, thus potentially resulting in accumulation of large viral loads and increased risk of immune escape.² By mainly targeting the SARS-CoV-2 spike protein, vaccines can favour propagation of variants with immuneescape mutations.³ Single point mutations in the receptor-binding domain of the viral spike protein are sufficient to facilitate the immune escape and transmission of resistant viruses.² By further examining the unpublished whole-genome sequencing data of vaccinated and unvaccinated participants in the study by Singanayagam and colleagues,¹ invaluable information could be gleaned about whether the current first-generation COVID-19 vaccines potentially exerted selective pressure for resistant SARS-CoV-2 variants.

Tracing the whole-genome sequencing data of all unvaccinated participants chronologically from the pre-alpha-variant (B.1.1.7) phase (September-November, 2020), to the alpha-variant phase (December, 2020, to March, 2021), and to the delta-variant (B.1.617.2) period (May 25-Sept 15, 2021) would likely reveal a trend of increasing number of mutations that converge towards the resultant whole-genome sequence aligned with delta lineagedefining mutations presented in figure 2 of the Article.1 To determine if vaccines possibly contributed to this genetic drift, the whole-genome sequencing data from patients who tested PCR positive (vaccinated and unvaccinated) can be compared with data from their respective contacts over time from the pre-alpha to the delta phases.

Identical whole-genome sequences between PCR-positive participants and their respective contacts demonstrates direct viral transmission without mutation. Clearly distinct whole-genome sequences between both groups indicate cross-infection of contacts by a different viral lineage. Slight variations in whole-genome sequences between both groups show mutation has occurred, in which case the vaccination status of the contact should be examined. If mutation occurred predominantly among vaccinated contacts but not within unvaccinated contacts, it suggests vaccine-induced mutation has developed. Because the sample size in the research by Singanayagam and colleagues¹ is relatively small, it will be worrisome if a fair number of vaccinated contacts of PCR-positive participants are identified with mutations, especially with the amino acid mutations summarised in the appendix.

The earliest detection of the delta variant was in India on Oct 14, 2020,⁴ before India's vaccination commencement on Jan 16, 2021.⁵ However, with fastidious propagation of these variants over time by non-sterilising vaccines targeting the spike protein, it is still reasonably plausible that selective pressure could have contributed to the current dominance of the delta variant.

It would be much appreciated if Singanayagam and colleagues would consider analysing their unpublished whole-genome sequencing data as suggested above. If theoretical risk of evolutionary escape from the existing COVID-19 vaccines² translates into real-life evidence, which could be verified via whole-genome sequencing data from this study,¹ then it will be prudent to expedite resources towards second-generation COVID-19 vaccines that exert sterilising immunity, in addition to non-pharmacological interventions.

I declare no competing interests.

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