PARLIAMENTARY INQUIRY QUESTION ON NOTICE

Department of Health and Aged Care

Senate Community Affairs References Committee

Inquiry into Excess Mortality

13 June 2024

PDR Number: IQ24-000071

Mortality rates for conditions with previous COVID infection

Spoken

Senator: Louise Pratt

Question:

Dr Gould: Senator, as an adjunct to Ms Jordan's response, I would like to point out that, as you alluded to, the Medical Research Future Fund has invested a lot in COVID research over the years. We have had over 85 grants in that space, and that really complements the data that we are talking about with research that happens in labs and is performed by clinicians. So I just wanted to point out that is a really important part of the way we are responding. In terms of our overall position on excess mortality, as we have said, we acknowledge that we have experienced excess mortality during the pandemic. As the ABS reports, COVID is the primary driver of that excess mortality, and that is COVID as listed as a cause of death, so it is a really important driver there. But we do acknowledge that, as we have heard before, with mortality for conditions like diabetes and heart conditions, these levels are elevated. We referred before to the fact that there is a strong and growing body of evidence to link those higher mortality rates for those conditions with previous COVID infection. There is new research coming out all the time linking those.

Senator PRATT: I would be grateful for any references to that, on notice. Thank you.

Dr Gould: We would be very happy to provide an extensive list of references.

Answer:

The Department of Health and Aged Care's submission to this inquiry details some of the key publications related to this topic.

A list of MRFF funded projects, including COVID-19 research projects, is available on the MRFF website at www.health.gov.au/resources/publications/medical-research-future-fund-mrff-grant-recipients.

In addition, below is a non-exhaustive list of the literature referred to by the department that outlines an association between SARS-CoV-2 infection and detrimental cardiovascular and diabetic outcomes. The impact of COVID-19 vaccination on these outcomes is also presented.

Link between COVID-19 and cardiovascular disease.

- Those who have had SARS-CoV-2 infection are at increased risk of incident cardiovascular disease spanning several categories, including cerebrovascular disorders, dysrhythmias, ischemic and non-ischemic heart disease, pericarditis, myocarditis, heart failure and thromboembolic disease. The risk of myocarditis is far higher in those who were infected with SARS-CoV-2 infection than in those who received a COVID-19 vaccine.
    - www.nature.com/articles/s41591-022-01689-3#:~:text=We%20show%20that%2C%20beyond%20the,myocarditis%2C%20heart%20failure%20and%20thromboembolic
    - www.nature.com/articles/s41591-022-01689-3#:~:text=We%20show%20that%2C%20beyond%20the,myocarditis%2C%20heart%20failure%20and%20thromboembolic
    - www.nature.com/articles/s41591-024-02987-8

Link between COVID-19 and diabetes.

- Several studies have shown a possible link between COVID-19 and increased risk of developing type 2 diabetes.
    - https://link.springer.com/article/10.1007/s00125-022-05670-0
    - www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2023.1170156/full
    - www.thelancet.com/journals/eclinm/article/PIIS2589-5370(23)00522-9/fulltext
- Initial studies also suggest a possible link between COVID-19 and increased risk of developing type I diabetes.
    - https://jamanetwork.com/journals/jama/fullarticle/2805461#:~:text=A%20diagnosis%20of%20COVID%2D19%20in%20children%20was%20associated%20with,diabetes%20incidence%20during%20the%20pandemic
    - https://jamanetwork.com/journals/jama/fullarticle/2809621

Impact of COVID-19 vaccination on excess mortality as well as cardiovascular and diabetic outcomes.

- There is a growing body of research that confirms COVID-19 vaccines are very effective at reducing risk of severe disease and death associated with SARS-CoV-2 infection. Further, in countries where community wide infection was already occurring, a more rapid roll-out of vaccination was associated with lower excess mortality than those with a slower roll-out. It should be noted that most Australians received a primary course +/- booster of COVID-19 vaccination before their first encounter with COVID-19.

    - www.frontiersin.org/journals/immunology/articles/10.3389/fimmu.2023.1151311/full
    - www.cureus.com/articles/163598-unveiling-the-impact-of-covid-19-vaccines-a-meta-analysis-of-survival-rates-among-patients-in-the-united-states-based-on-vaccination-status#!/
    - www.sciencedirect.com/science/article/pii/S0264410X22015614?via%3Dihub
- Cardiovascular adverse events following COVID-19 vaccination are rare and when they happen they are rarely fatal.
    - www.health.gov.au/resources/publications/covid-19-vaccination-guidance-on-myocarditis-and-pericarditis-after-covid-19-vaccines?language=en
    - www.nature.com/articles/s41467-023-36494-0
- COVID-19 vaccines are associated with a lower risk of a major adverse cardiovascular event after SARS-CoV-2 infection.
    - www.sciencedirect.com/science/article/pii/S073510972207601X?via%3Dihub
- Having type 2 diabetes increases risk of severe outcomes associated with SARS-CoV-2 infection and vaccination reduces this risk.
    - www.nature.com/articles/s42003-024-05799-1
- There is no evidence of increased risk of incident diabetes following COVID-19 vaccination.
    - https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1004274