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Australian COVID-19 pandemic: A Bradford Hill Analysis of Iatrogenic Excess Mortality

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Abstract

Australian official mortality data show no clear evidence of significant excess deaths in 2020, implying from an older WHO definition that there was no COVID-19 pandemic. A seasonality analysis suggests that COVID-19 deaths in 2020 were likely misclassifications of influenza and pneumonia deaths. Australian excess mortality became significant only since 2021 when the level was high enough to justify calling a pandemic. Significant excess mortality was strongly correlated (+74%) with COVID-19 mass injections five months earlier. Strength of correlation, consistency, specificity, temporality, and dose-response relationship are foremost Bradford Hill criteria which are satisfied by the data to suggest the iatrogenesis of the Australian pandemic, where excess deaths were largely caused by COVID-19 injections. Therefore, a strong case has been presented for the iatrogenic origins of the Australian COVID-19 pandemic and therefore, the associated mortality risk/benefit ratio for COVID injections is very high.

Introduction

On 11 March 2020, the World Health Organization (WHO) declared [1] the COVID-19 pandemic based on 4,291 deaths, by 118,000 cases in 114 countries, with an average of about 1,000 cases in each country. Based on this very small sample, the WHO assumed that the COVID-19 disease is highly infectious and has an infection fatality rate (IFR) of at least 0.4 percent. Therefore, the COVID-19 pandemic was declared based on expectation and not on fact, as the WHO had previously defined for an influenza pandemic [2]:

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, and simultaneous epidemics worldwide with ***enormous numbers of deaths*** and illness.

Emphasis added. A pandemic should be justifiably declared only if there are "enormous numbers of deaths", for otherwise seasonal influenza or even the common cold of the Rhinovirus could be declared as pandemics, i.e., just based on numbers of cases of infection. By now, it is abundantly clear that the number of cases defined by the PCR tests may be grossly inflated (see section 2).

By assuming "cases" would lead to "enormous deaths", the WHO declared a pandemic based on supposition, not on scientific fact. The presumption of sound science by governments has allowed them to justify harsh public health measures which may have been counter-productive ultimately causing more deaths. Based on objective data, this paper assesses whether there were enough excess deaths to warrant declaring a pandemic in Australia. By investigating those excess deaths, the probable cause of the Australian pandemic is deduced in this study.

In section 2, it is discussed that assessment of the pandemic based solely and quantitatively on COVID infection cases and deaths is questionable, because cases of COVID infection and deaths attributed to the SARS-CoV-2 virus have not been adequately proven. That is, the pandemic cannot be accurately assessed from COVID-19 data which are scientifically flawed, see discussed below. This paper assesses the COVID-19 pandemic in Australia based on all-cause mortality data, consistent with the earlier WHO definition of pandemics.

Since accurate and reliable data are critically important as inputs to the data analysis to draw valid conclusions, data methodology is discussed in section 3. In 2020, when many Victorian deaths were attributed to COVID-19, the impact on total mortality was insufficient to declare a pandemic in Australia. Details and possible explanations are discussed in section 4, to justify calling 2020 as the "pre-pandemic" phase.

Australian excess deaths began to rise to a statistically significant level in 2021 to warrant the appellation of a "pandemic". Early increases in excess deaths accompanied the early rollout of mass COVID-19 injections. The injections were called "vaccines", but they do not prevent infections, nor were they tested to inoculate against infections, as admitted recently by Pfizer to the European Parliament [3].

This paper rejects calling the COVID-19 injections "vaccines" which were never tested to be such. The public has been misinformed and misled to accept COVID-19 injections as "vaccines".

When the injections clearly failed to reduce transmissions, the rhetoric of "vaccine" benefit changed to reducing serious illnesses and deaths. This claim is also proved false in this paper, where the pandemic phase defined by elevated excess deaths is shown to be correlated with mass COVID-19 injections in section 5.

In section 5, the strong correlation between doses of injections administered and increased levels of excess deaths five months later suggest iatrogenic causality. This possibility is further strengthened by aspects of consistency and specificity in section 6 where the evidence of causality is seen by consistency across time and geography. Also, specificity is evident from the fact that the "vaccinated" are more likely to die than the "unvaccinated", who are simply defined as those without any injections, rather official definitions where the "unvaccinated" may have had injections.

The main contributions of this paper, addressed in sections 5 and 6, are what we consider the five foremost criteria of Bradford Hill [4] causality for an iatrogenic pandemic. The remaining four aspects of Bradford Hill analysis are briefly reviewed from existing literature in section 7 on coherence and plausibility and in section 8 on experiment and analogy.

Essentially, iatrogenesis of the pandemic is coherent with, and does not violate, existing knowledge of pathology and epidemiology and the biological mechanisms are highly plausible, with some clinical experiments to validate them. In many ways, the current pandemic is analogous to the previous "swine flu" pandemic in 2009, except that the 2009 episode was not a pandemic, which was without "mass vaccination".

Section 9 contains a summary of preceding sections, with a tabulated synopsis of all nine Bradford Hill criteria discussed. The final section concludes that a strong case has been presented for the iatrogenic origins of the Australian COVID-19 pandemic.

COVID-19 Data

This section explains why the Australian COVID-19 pandemic cannot be accurately assessed from COVID-19 data, because COVID-19 cases and infections were poorly defined. Therefore, COVID-19 data are scientifically flawed, but nevertheless they drove and continue to drive erroneous health policies.

A COVID infection has no definitive set of symptoms and was not detected by the presence of the SARS-CoV-2 virus, but was defined by a positive PCR test. However, a positive PCR test does not detect the presence of the SARS-CoV-2 virus which is the definitive pathogen of the COVID-19 disease. The CDC has explicitly made clear the following disclaimer [5]:

Since no quantified virus isolates of the 2019-nCoV were available for CDC use at the time the test was developed and this study conducted, assays designed for detection of the 2019-nCoV RNA were tested with characterized stocks of in vitro transcribed full-length RNA (N gene; GenBank accession: MN908947.2) of known titer (RNA copies/µL) spiked into a diluent consisting of a suspension of human A549 cells and viral transport medium (VTM) to mimic clinical specimen.

Emphasis added. Therefore, COVID-19 cases may be cases of respiratory infections caused by other RNA viruses, which also implies that COVID cases and deaths may be wrongly attributed to the SARS-CoV-2 virus, wherever its controversial origin.

Deficiency of the PCR test has been acknowledged by the CDC in mid-2021 when it issued a "Lab Alert" [6] to plan a withdrawal of the test:

After December 31, 2021, CDC will withdraw the request to the U.S. Food and Drug Administration (FDA) for Emergency Use Authorization (EUA) of the CDC 2019-Novel Coronavirus (2019-nCoV) Real-Time RT-PCR Diagnostic Panel, the assay first introduced in February 2020 for detection of SARS-CoV-2 only.

CDC encourages laboratories to consider adoption of a multiplexed method that can facilitate detection and differentiation of SARS-CoV-2 and influenza viruses.

Emphasis added. From 2022, instead of the PCR test which cannot differentiate between SARS-CoV-2 and influenza viruses, the CDC has suggested the use of a multiplexed method. A quadraplex method [7] was not discovered until early 2021, when the researchers claimed to have simultaneously detected from clinical specimens two SARS-CoV-2 genes, as well as influenza A and influenza B viruses:

To the authors' knowledge, ***this is the first study to report a quadruplex rRT-PCR assay*** for the detection of two SARS-CoV-2 genes, hIAV and hIBV with perfect clinical performance.

Emphasis added. It is unclear whether the research has been independently verified or whether commercial quantities of the quadraplex method for detecting SARS-CoV-2 have been produced or widely used since 2022. It is quite clear that COVID-19 data are scientifically flawed before 2022 everywhere and very likely since. Australian data continue to be flawed because PCR tests are still being used. The inability to distinguish between the detection of the SARS-CoV-2 and influenza viruses is a fundamental scientific uncertainty, which renders COVID-19 data scientifically flawed.

Adding to this uncertainty about what is identified in COVID infections and cases, there is also a significant uncertainty about the titer (genetic fragments per unit volume) needed to define presence of the infection. Through a sufficient number of cycles of titer amplification, which is variable and not scientifically determined, the PCR test can nearly always return a positive result. Therefore, whether someone has a COVID infection at all is not clear from a PCR test.

For the first time in medical history, people who are perfectly healthy with no symptoms, have been declared COVID cases, based solely on unreliable positive PCR tests. A person could have minute amounts of dead influenza viruses and be declared a COVID threat to public health.

On top of those fundamental uncertainties, there is a question of whether a particular COVID death is a death "with COVID" or

"from COVID" in a typical case of the deceased having other comorbidities. Subjective judgement, distorted at times by financial incentives, creates uncertainties which can be removed objectively by autopsies, but they were rarely performed.

Therefore, COVID cases and deaths cannot be used to characterize the pandemic, because the division of excess deaths into COVID and non-COVID causes appears arbitrary and inaccurate. Australian health policy has been based on misinformation from flawed COVID-19 data which are scientifically unsound [9]. This paper focuses on all-cause mortality and excess deaths rather than COVID deaths as indicators of the severity of the Australian pandemic.

Data Methodology

Even as unreliable as the COVID raw data are, Australian official COVID-19 data seen by the public are not even the raw data which are collated by state health authorities. They control and publish selected data in weekly and monthly reports without making available the raw data which are needed to independently verify the official data. These reports from health authorities may be misleading due to selection and classification biases, which have rendered invisible adverse events and deaths related to "vaccines".

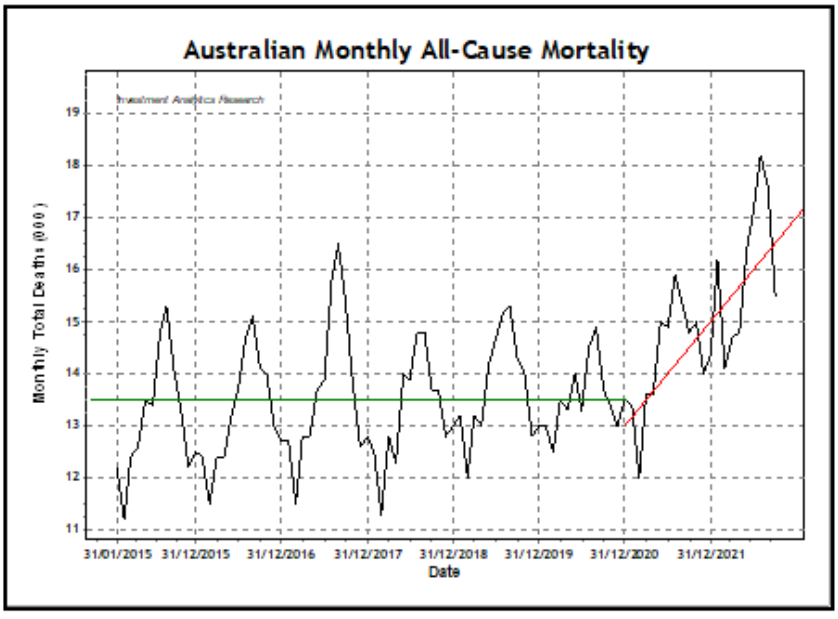
For example, official reports allowed the national broadcaster ABC to claim falsely on prime-time television in July 2022 that the "unvaccinated" are 16 to 37 times more likely to die than the doubly "vaccinated" [8]. This misinformation was based on a key official data reporting flaw which came from classifying some deaths as "unvaccinated" even though they had had COVID-19 injections and often multiple times [9].

This paper avoids the processed data of health authority reports to eliminate their selection and classification biases. The main reliance is on data [10] from the national collector, the Australian Bureau of Statistics (ABS), which has the fewest conflicts of interest, but its data and reports are not accepted uncritically either, as will be illustrated below.

In scientific research the raw data and their sources should be publicly accessible or available and the methods of data analysis should be clearly disclosed so that the conclusions of this or any other study can be reproduced precisely.

This study depends principally on the all-cause mortality data published by the ABS, from January 2015 to September 2022, the latest month of full reporting data. The raw data are shown in Figure 1, where the horizontal green line and the sloping red line have been added heuristically to suggest a "regime change".

Figure 1



The horizontal green line (for guidance) suggests that 2020 appears to be merely a continuation of the previous trend of relatively steady fluctuations in all-cause mortality. On a definition of pandemic based on excess mortality, there was no evidence of a pandemic in Australia in 2020, which could be called the pre-pandemic phase, followed by the pandemic phase starting in 2021 (the sloping red line).

The above raw data is used to calculate excess mortality in this paper, instead of simply accepting the official excess mortality data published by the ABS. The ABS has changed its baseline definitions (moved the "goal posts") for calculating 2022 excess mortality in an inconsistent manner, without providing adequate justification. Normally, the baseline for calculating excess mortality is the average of the previous five years, but the baseline for 2022 has been defined by the ABS as the average of four years, 2017-2019 and 2021, without adequate reasons [10]:

Throughout this report, counts of deaths are compared to an average number of deaths for previous years. In this report, data for 2021 is compared to an average number of deaths recorded over the 5 years from 2015-2019 as was the case in previous publications. Data for 2022 is compared to a baseline comprising the years 2017-2019 and 2021. ***2020 is not included in the baseline***

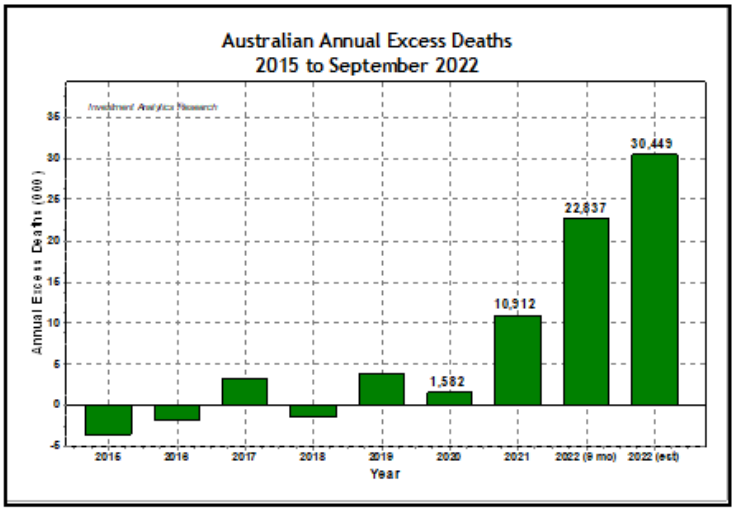
for 2022 data because it included periods where numbers of deaths were significantly lower than expected.

Emphasis added. Note that the arbitrary exclusion of 2020, a year where *"numbers of deaths were significantly lower than expected",* raises the baseline and therefore lowers excess mortality statistics for 2021 and 2022, creating a misleading impression of a less serious pandemic.

The five-year averages of 2015 to 2019 are used uniformly as the baseline throughout this study to assess the impact of COVID-19 on Australian mortality. Therefore, our excess mortality statistics for 2022 are different from official ABS statistics. Even though the differences are not great, a consistent baseline is used throughout in this paper for sake of scientific clarity.

The annual excess mortality for Australia from 2015 to the present is shown in Figure 2.

Figure 2

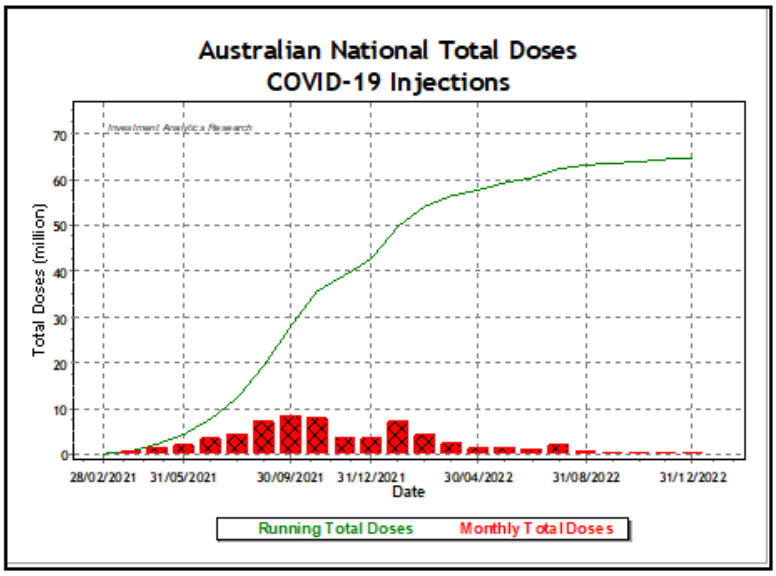


The annual excess mortality for 2020 was well within the range of normal statistical fluctuations and therefore validates the proposition that there was no pandemic in Australia, even though there were about 900 COVID-19 deaths (usually revised lower by the ABS over time) in 2020.

Clearly, dramatic rises in excess deaths have occurred since 2021, with the last bar (in Figure 2) being an annual estimate based on nine months of actual data. Relative to excess mortality in 2020, 2021 was nearly 7-fold and 2022 is already over 14-fold and potentially more than 19-fold. The data on excess mortality also validates that the Australian pandemic phase started in 2021, with the 2021 and 2022 total excess death toll likely to reach over 41,000 or 26 times that of 2020.

Clearly, the demarcation between pre-pandemic phase in 2020 and the pandemic phase since 2021 is the "elephant in the room" – mass COVID-19 injections for most of the Australian population. To study their relationship to excess mortality, raw data on total national doses of COVID-injections administered over time have been obtained from a third-party data aggregator *CovidBaseAU* [11], which also supplies data to international data providers such as *Our World in Data*. The data is shown in Figure 3:

Figure 3



Over 64 million doses have been administered to a population of 25.8 million. The two peaks of mass COVID injections occurred in September 2021 for the initial drive and in January 2022 for the first booster drive. These drives will be seen below to be correlated to peaks in excess deaths about five months later.

The above raw data in Figure 1-3, which are largely free from data manipulation, are the main sources from which data analysis is performed transparently in the rest of this paper to investigate the iatrogenesis of the Australian COVID pandemic.

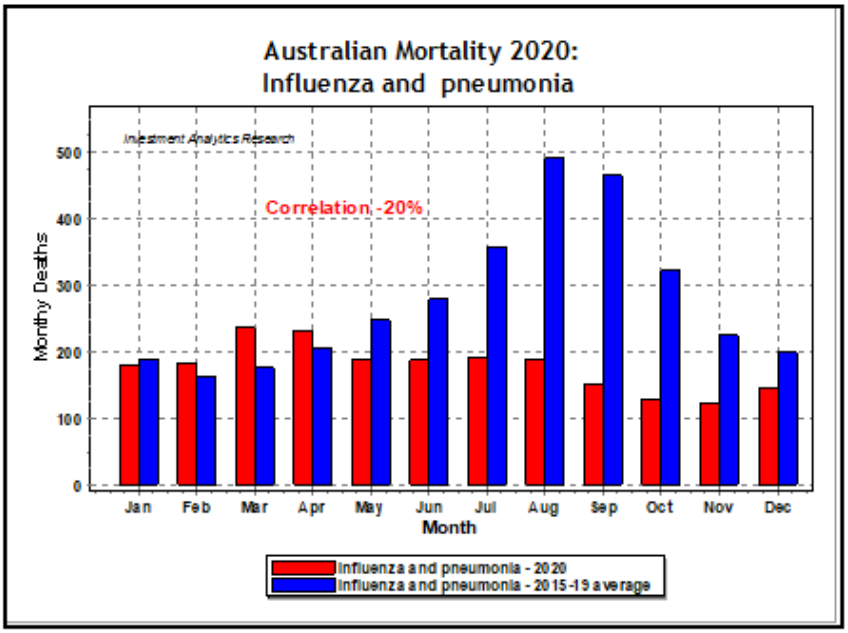
The Pre-pandemic Phase

The iatrogenic hypothesis of the Australian pandemic depends necessarily on objective evidence that there was no significant excess mortality before government intervention with mass COVID-19 injections. The evidence is already apparent in Figure 2 above, where all-cause mortality in 2020 was well within normal expectations.

While there was no pandemic in 2020, could the 900 COVID-19 deaths recorded in 2020 presage a pandemic to develop from the novel coronavirus? A seasonality analysis with Australian mortality data raises serious doubt about how "novel" is the SARS-CoV-2 virus in Australia. Its closest relative, the 2003 SARS (now called SARS-CoV-1) was declared an "outbreak", not even a pandemic. Respiratory viruses mutate relatively frequently; so when is a mutation "novel"? COVID-19 viruses had many variants; why are they not novel "viruses?"

Respiratory diseases are seasonal, with most dying in late winter, which are the months of August and September in the southern hemisphere, when respiratory diseases commonly strike near the end stages of life. The typical pattern of seasonality is shown by the blue bars in Figure 4, based on five-year averages from 2015 to 2019.

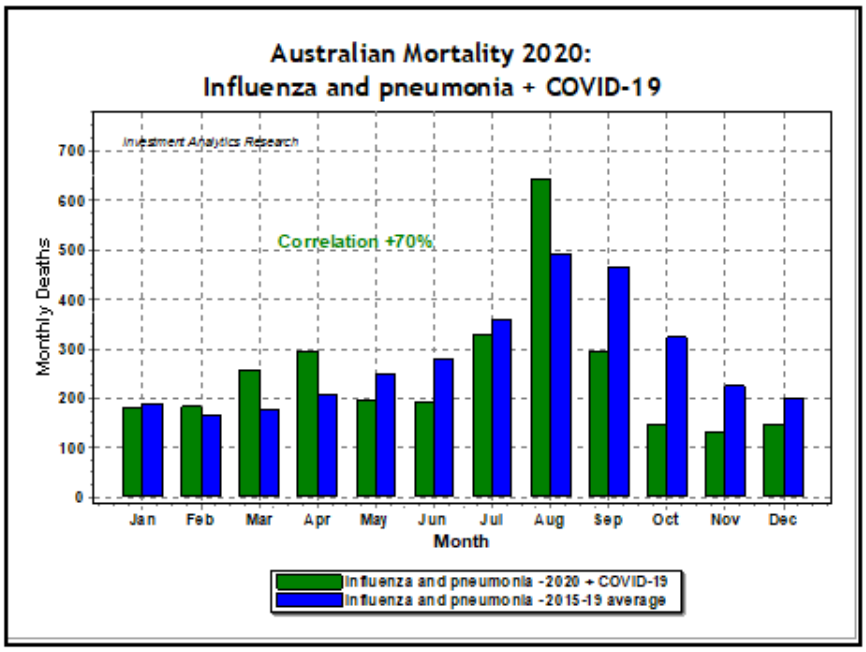
Figure 4



By comparison, 2020 was a very odd year, when deaths from influenza and pneumonia (red bars in Figure 4) substantially disappeared for several months around their normal peaks in late winter. The correlation between normal fluctuations and 2020 fluctuations was negative, at -20%, indicating a significant seasonal anomaly.

However, COVID-19 is a respiratory disease, with similar symptoms to influenza and pneumonia (I&P) and there were surges in supposedly COVID deaths around August in 2020, particularly in Victoria. If the deaths of I&P and COVID-19 are added together, then the comparison to normally expected seasonality is shown in Figure 5.

Figure 5



In the I&P comparison in Figure 5, the green bars including COVID deaths are now consistent with the blue bars representing the expected seasonality pattern of previous years, with a positive correlation of +70%.

In view of the poorly defined characteristics of COVID-19 infection and the subjective attribution of COVID-19 deaths as discussed in section 2, there is a strong possibility that COVID deaths may have been substantially misclassified from I&P deaths.

The likelihood is very high that COVID deaths were misclassified from I&P deaths, because I&P deaths are themselves not clinically well-defined [12], as evident in Table 1.

Table 1

CHAPTER X Diseases of the respiratory system (J00-J99)	2019	2020
Diseases of the respiratory system (J00-J99)	15,330	12,721
Influenza and pneumonia (J09-J18)	3,855	2,287
Influenza, virus not identified (J11)	249	7
Pneumonia, organism unspecified (J18)	2,721	2,157

Table 1 is a very small and partial extract from an extensive ABS data table listing detailed causes of doctor-certified deaths for 2019 and 2020 in Australia [12]. Note the codes in the brackets indicate categories and sub-categories (indented). In 2019, there were 3,855 deaths from influenza and pneumonia of which 2,970 deaths (77%) had no pathogen identified.

Note that this paper makes no assertion about whether the COVID-19 virus or disease exists or otherwise. The evidence suggests that COVID-19 symptoms and diagnosis are so imprecise and so much like cases of I&P that they may have been easily misclassified, as discussed in section 2.

Importantly, there are strong financial incentives for hospitals to re-classify I&P patients as COVID-19 patients, because the Australian Government had provided $4.8 billion for COVID-19 pandemic response, stating [13]: *"The full resources of our world-class health system – a blend of public and private systems – are needed to focus on treating COVID-19 patients"*, indicating more COVID-19 patients would mean more funding to hospitals.

Finally, the narrative that Australian public health measures such as masking and lockdowns were responsible for reducing excess deaths 2020, has little credibility, for several reasons. Firstly, it was against the recommendations of the global pandemic preparedness exercise conducted in 2019 Event 201, which not only did not recommend lockdowns, but instead recommended open borders [14]:

Countries, international organizations, and global transportation companies should work together to ***maintain travel and trade during severe pandemics.*** Travel and trade are essential to the global economy as well as to national and even local economies, and they should be maintained even in the face of a pandemic.

Emphasis added. Also, tens of thousands of highly credentialed medical researchers and doctors have signed *The Great Barrington Declaration* [15] recommending against masking and lockdowns, in favour of "focused protection". Overall, large amounts of research [16] have shown that there is no clear evidence that masking and lockdowns are effective, with countries such as Sweden ignoring such measures, performing overall

none the worse compared with other countries. If those public health measures were so good, why do governments even need "vaccines"?

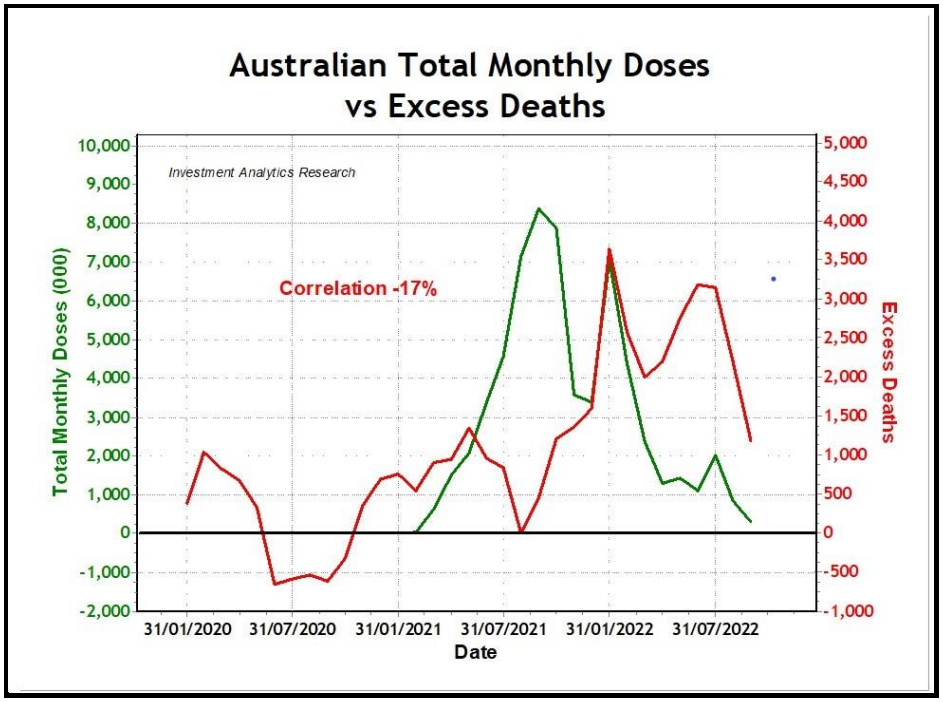
In summary, on statistics alone, there was no clear evidence of a new deadly coronavirus in Australia in 2020. Regardless of the precise nature or cause of COVID deaths, their impact on excess mortality in 2020 was insufficient to characterize that year as a pandemic.

The Pandemic Phase

The pandemic phase in Australia began in 2021 with rising all-cause mortality and excess mortality (see Figure 1 and Figure 2). Also, beginning in 2021 was the start of mass COVID-19 injections, which governments called "safe and effective vaccines", for a pandemic just shown non-existent in 2020.

The coincidental increases in excess mortality and doses of injections administered (see Figure 3) are investigated here for possible iatrogenic causality. Essentially, the raw data shown in Figures 1-3 are reassembled into a new dataset to reveal the relationship between excess deaths and COVID injections as seen in Figure 6

Figure 6

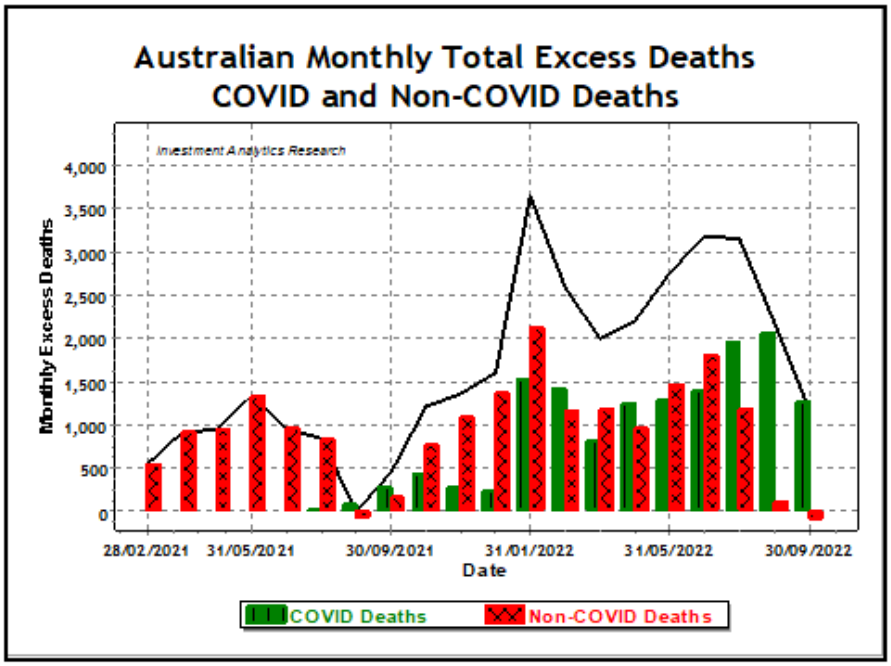


Overall, there was a negative correlation of -17% between monthly doses of injections and monthly excess mortality, with best evidence of correlation occurring in January 2022 and some evidence of correlation in the first half of 2021, when mass injections started. Contemporaneous correlation should not be expected because there is normally a time-lag between medication (the cause) and its effects, as will be shown below.

However, the close correlations observed in some periods suggest the existence of immediate impact of the injections on mortality probably due to anaphylaxis or other pre-conditions as reported in OpenVAERS in the USA [17]. There may be more than just a concurrent correlation between mass injection drives and deaths, which have been discussed in a previous paper [9].

The small peak in excess deaths in the first half of 2021, when COVID deaths were largely absent per ABS data [10], has been attributed to non-COVID deaths, as seen as the first peak in Figure 7.

Figure 7

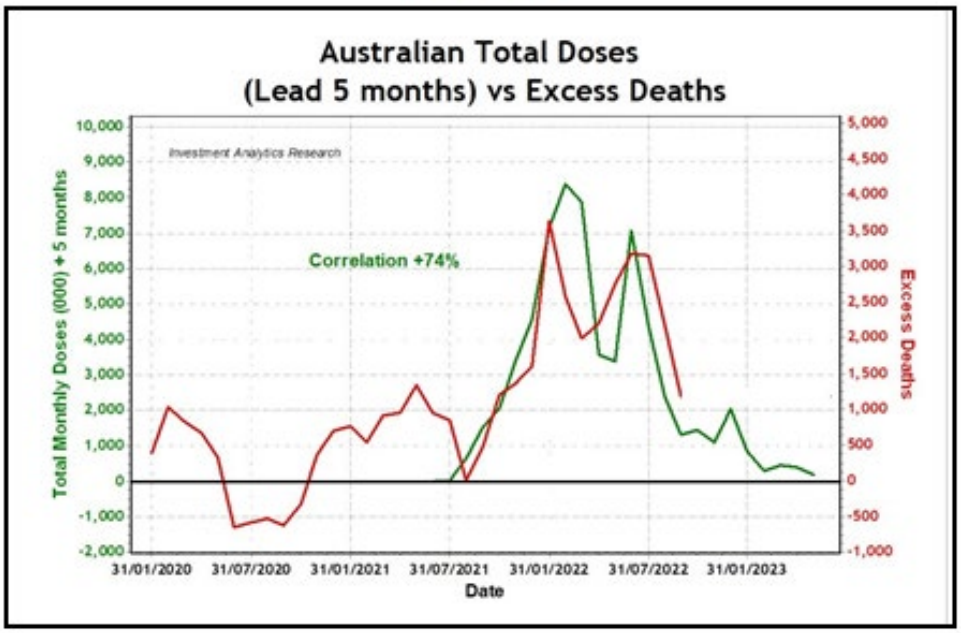


As mass injections were rolled out in 2021, there was a surge in deaths of the elderly, particularly those in the 85+ age group. Those who were already frail with chronic inflammation and numerous comorbidities easily succumbed to the extra challenge presented by the injections. Whether they had COVID infections or not, it was probably not unreasonable to assume they died from pre-conditions, even though an attribution to COVID deaths would have been inconvenient to the narrative of "vaccine protection".

The excess death peak in January 2022 may be due to the combined effects of both the initial doses of injection in September 2021 and the subsequent boosters in January 2022 due to the phenomenon of "pathogenic priming" [18]. That is, there may be a combination of both a concurrent effect of fatal inflammation and a lagged effect of immune suppression, to be discussed below.

That is, the initial doses of injection may have weakened the immune system of the recipients to make them more vulnerable to subsequent challenges introduced e.g. by the boosters, a phenomenon also known as "antibody dependent enhancement" of disease [19, 20]. Indeed, if the data for total monthly doses were time shifted forward by five months, the two datasets (as Figure 6) now overlap well in Figure 8.

Figure 8



The rapid rise in excess mortality in January 2022, which coincided with the first booster campaign, was correlated with the peak rate of COVID-19 injection, which occurred in September 2021. A secondary injection peak from the first booster campaign was correlated another five months later with a secondary peak in excess mortality in July 2022.

The maximum correlation between COVID-19 injections and excess deaths at +74% occurs for a five-month lag. From analysis, the correlation for a four-month lag is 61%, while for a six-month lag it is 64%. Therefore, the evidence suggests that the five-month lagged effect on excess mortality is stronger than the concurrent effect or other lagged effects due to the COVID injections.

The five-month lag has been observed briefly in US and UK datasets, but has not been supported by more detailed investigations, as is being done here.

Metaphorically, the high correlation in January 2022 between the booster injections and deaths is likely to be the result of the second of a "one-two knockout punch", where the first punch did the most damage five months earlier by immune suppression (see discussion below) and then by the second punch of the boosters which quickly delivered the "coup de grace" to their victims.

As an example, New South Wales data show [8] that the two-dose population was dying at a rapid rate of several hundred per week during the first booster campaign in January 2022, while very few deaths were recorded from the boosters. The boosters were lethal to some of the immune-suppressed two-dose population, but those deaths were wrongly registered as two-dose deaths due to a flawed data reporting convention [9], where injections were recognized only after weeks of delay.

Those who survived the first boosters would have had their immune system further weakened making them susceptible to viral infections and harm of the second boosters, which contributed later to the second peak in excess mortality in July 2022. The more injections anyone takes the more likely they will sustain iatrogenic injuries and death. Many Australians have learned from their actual experience, ignored official advice, and have become more hesitant of repeated injections.

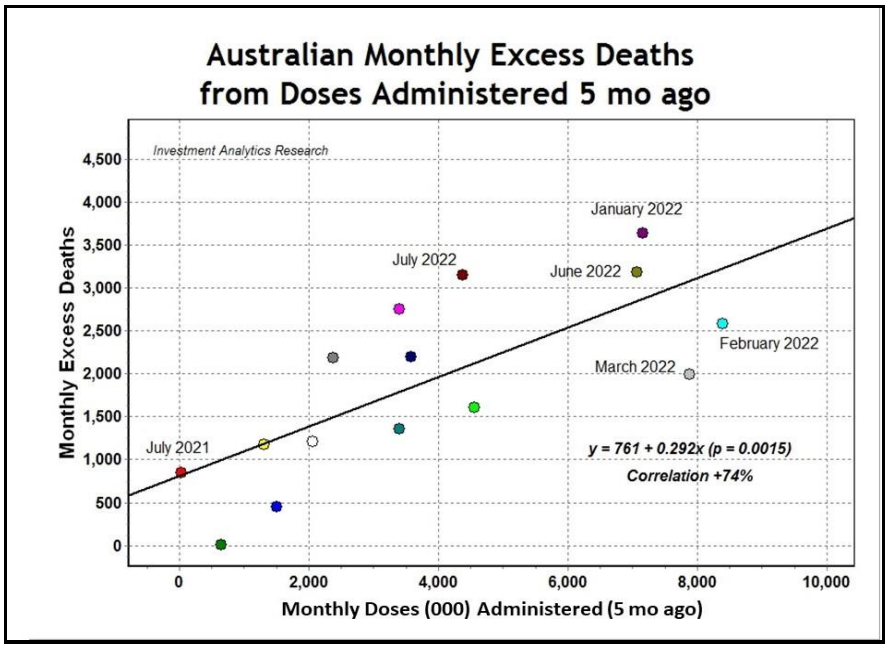
Fortunately, due to falling rates of COVID-19 injections since July 2022, the empirical evidence may be predicting good news for lower rates of excess mortality (with data to be released) for the rest of 2022 per the injection data. Except for a blip in January 2023, excess mortality should continue to fall, as presaged by the tail-end of the green curve in Figure 8. The prediction has been confirmed by the data just released [10] for October and November 2022, after the completion of the research for this paper.

The data also suggest that the naïve proportional estimate of excess deaths for the whole of 2022 in Figure 2 is likely to be an over-estimate because of rapidly falling rates of injection five months earlier. The trend of falling excess mortality should continue, unless official advice succeeds in persuading the public to accept more boosters, which would be the fifth dose for many.

The stronger correlation and temporality with the five-month lag satisfy two of the main criteria of Bradford Hill causality [4], which are the "strength" of high correlation and "temporality" satisfied by a regular five-month lag of the excess mortality effect following the COVID-19 injection cause.

Another important Bradford Hill criterion is "biological gradient" in medicine, which is the existence of an expected, monotonic dose-response relationship, i.e. higher doses should lead to stronger responses. This criterion is met statistically in Figure 8, where excess mortality rises and falls with doses administered. The dose-response relationship can be made mathematically more precise by an ordinary-least-squares (OLS) regression which is statistically significant with a p-value of 0.0015 as shown in Figure 9.

Figure 9



On average, the above dose-response relationship suggests, for example, that five million doses administered in a month nationally would lead on average to 2,221 excess deaths five months later, with a standard deviation of 705 excess deaths or a likely range between 1,516 and 2,926.

In summary, in meeting three main Bradford Hill criteria for causality a strong case, based on statistical data alone, has been made for the iatrogenesis of excess mortality in the Australian COVID-19 pandemic.

Consistency and Specificity

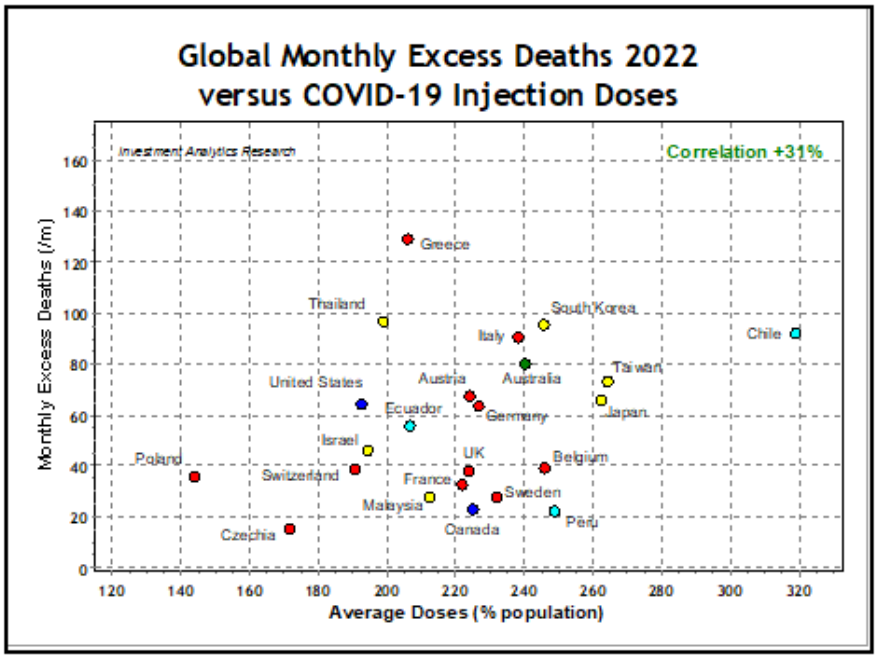
As shown above, Australian data have displayed consistency in causal associations over time. Are similar associations observed in other places under similar conditions? Consistency is another criterion which Bradford Hill [4] thought was important to consider.

International comparisons of the relationship between COVID-19 injections and excess mortality are made difficult by heterogeneity of the data. Some countries, such as those in Africa, have largely avoided mass injections, while other countries, such as those in the pacific islands as well as Africa, have irregular excess mortality statistics. Even for those countries which have data both on doses of injection and on excess mortality, some countries report weekly, while others report monthly and their reporting dates and periods of available data are typically different.

From *Our World in Data* [22], there are about two dozen countries, including most of the large developed countries, which have comparable abundance of data to perform a cross-sectional analysis. The level of COVID injection for any country is taken to be the latest reported total doses administered per hundred of the population. The average monthly excess mortality is calculated from the increase in cumulative excess mortality per million between the earliest injection start date and the latest report date, which vary between countries.

While the international dataset is far from complete and the data of selected countries with sufficient quantity, are likely inconsistent in quality, a positive dose-response relationship appears discernible across the selected countries as shown in Figure 10.

Figure 10



Country colours refer to their continents. So far in 2022 the Australian excess mortality per million population is about double that of the United Kingdom, but Australians are more highly "vaccinated". Australia with its higher dosage also leads its US, UK and Canadian partners in excess deaths. A clear dose-response relationship appears mildly consistent at +31% correlation across 23 countries.

Another useful criterion of Bradford Hill causality is "specificity", which is related to the question whether there are competing causes for the excess deaths, with similar strengths of association. Note that specificity is not a necessary criterion, but one which, if satisfied, helps to draw conclusions for the most probable cause. Is iatrogenesis the strongest and most specific explanation for the observed excess mortality?

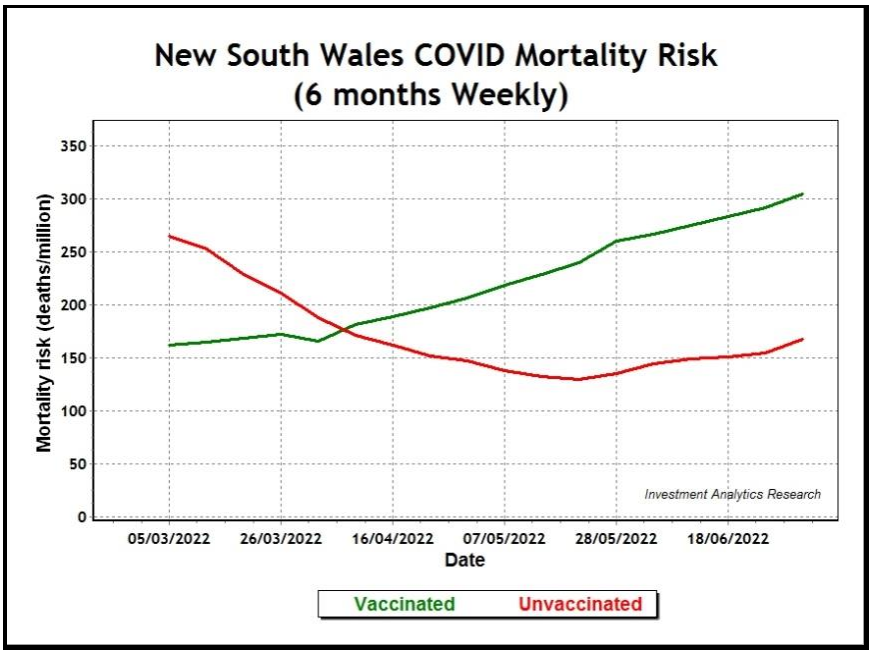
Bradford Hill [4] gave the example of smoking causing lung cancer, which has potentially many possible causes, but smokers have statistically significant higher incidences of lung cancer than non-smokers. Therefore, smoking is an important specific cause of lung cancer. The close association between COVID injections and excess deaths shown above suggests a similar argument prevails for iatrogenesis.

Classification bias has resulted in flawed data reported by the health authorities, which have misled the public to believe most excess deaths are from the "unvaccinated" [8, 9]. As mentioned above, the national broadcaster ABC wrongly stated on prime-time television that the "unvaccinated" are 16-37 times more likely to die than the "doubly vaccinated".

Australian adults (age 16+) nearly all (97.5%) have had at least one dose of the injection [11]. Is it likely that the remaining 2.5% of the adult population are responsible for most of the excess deaths?

New South Wales Health has COVID death data segregated by "vaccination status" which is defined by the number of doses [8, 9]. The data permit the "unvaccinated" to be properly defined as those without any injections. The data show that, by mid-2022, the "vaccinated" had about double the COVID mortality risk compared to the "unvaccinated", as seen in Figure 11.

Figure 11



This COVID injection enhancement of COVID deaths extends to excess mortality and as fifth dose or the third booster rolls out across Australia from March 2023, excess mortality is expected to remain elevated. As Bradford Hill noted [4], this is a "specificity in the magnitude of association".

Coherence and Plausibility

On Bradford Hill's coherence and plausibility, the suggestion of iatrogenic origin of excess deaths following five months after COVID injections does not contradict any research on "vaccine safety". The clinical trials conducted were much shorter than five months. For example, the Pfizer BNT162b2 trial [23] was between 27 July 2020 and 14 November 2020, with a data cut-off date 9 October 2020.

That is, the Pfizer trial data analysed were conducted over eleven weeks or 77 days, about half of the time necessary for fatalities to occur per the above empirical findings, so the suggested iatrogenesis is coherent and not in conflict with any known facts.

Are there any plausible biological mechanisms which could explain the causal impact of COVID-19 injections on the excess mortality of the young and healthy? In the past three years, there has been a deluge of research published on how the spike protein, either from the assumed SARS-CoV-2 virus infection or generated from the mRNA injections, could lead to inflammation in various organs causing death.

Most of the proposed mechanisms are evidential, plausible and coherent with existing knowledge on the cutting-edge of medical research. However, the "speed of science" requires many more years of replication and validation of the research to sort out the best explanations for the ever-accumulating evidence. It is beyond our knowledge or the scope of this paper to comment on the vast literature, except to mention some research findings which may be relevant to the statistical observations presented in this paper.

Most theories of the iatrogenesis of the COVID injections revolve around mechanisms for how the spike protein can cause a suppression of the immune system called "pathogenic priming" [18] or "antibody dependent enhancement" [19, 20]. Essentially, after repeated infections or mRNA injections, the body adjusts to the pathogen or similar ones, by down-regulating the immune system.

In a recently published clinical study [21] of the mRNA injections, production of neutralizing IgG3 antibodies against the spike protein was observed to switch over time to the production of non-neutralizing IgG4 antibodies. Thus, the class switching may reduce the rate of clearance of the toxic spike protein which may accumulate sufficient titers to cause pathogenesis and mortality.

The five-month lag between injections and mortality found in this paper may be related to the switching time between the classes of antibodies, which was not the focus of the cited clinical study, but it provides some useful indications. The levels of IgG antibodies were measured 10 days and 210 days after the second mRNA dose.

Class switching did not occur at 10 days, but was observed at

210 days, which suggests that it is a relatively slow process [21]. However, some cases of breakthrough infection 70 days after the second dose suggest the immuno-suppression effect may already occur meaningfully much earlier.

The recommended interval between the first and second dose of mRNA injections in Australia is between 8 to 12 weeks. If the antibody class switching mechanism were responsible for the excess deaths five months later, then the mechanism would suppress immunity significantly after about 100 days. In summary, the class switching to IgG4 antibodies is a plausible, but not a proven, mechanism to explain the observed immune suppression of COVID-19 injections, a mechanism worthy of further research.

Experiment and Analogy

By "experiment", Bradford Hill [4] refers to any laboratory (in vitro) or clinical (in vivo) evidence to support the epidemiological association between cause and effect. In the current context of causes of excess mortality, "experiment" should be taken to mean post-mortems and autopsies to show the connection between COVID injections and deaths.

Australian governments have deliberately discouraged such "experiments" because they may lead to findings which cause "vaccine hesitancy". For example, Australian doctors have been threatened with fines of up to $20,000 for using serological tests to verify the results of the PCR tests for COVID-19 diagnosis [24]. Nevertheless, the scientific imperative is strong enough to have led to several post-mortem studies [26-29] to discover the "smoking gun" evidence of spike proteins from COVID injections.

The SARS-Cov-2 virus is defined by a full genome sequence published by the Wuhan Institute of Virology [25]. Without any claim having been independently validated, no virus has ever been isolated from COVID-19 patients which matches exactly the genome sequence, nor has the spike protein from infections been exactly matched to that of the SARS-CoV-2 virus. The messenger RNA which is synthesized and manufactured to go inside the lipid nanoparticles (LNP) of the mRNA injections, is presumably conformal to the relevant part of the published sequence.

The spike proteins found in tissues from autopsies may originate, a priori, from infections and/or from injections. In view of how the PCR test was developed, as discussed in the introduction of this paper, without genetic analysis, the spike proteins from a COVID infected person may have come from an influenza virus, which differs from a coronavirus mainly in having a segmented, rather than continuous, genome.

If COVID injections suppress the immune system and hinder the clearance of the pathogenic spike proteins and indeed, manufacture even more spike proteins by the body's own cells, then post-mortems and autopsies should provide the evidence from significant quantities of spike proteins.

Indeed, from autopsies, the absence of the nucleocapsid IgG/IgM and their characteristic morphological features of COVID-19 is the indicator of mRNA injection origin of the spike proteins [26-29]. The observed time lags after injections of deaths occurring within days to several months are consistent with the combination of a short-term causality and a long-term causality discussed above.

The autopsy experiments, where COVID morphologies are absent, without viral nucleocapsid protein and the antibodies associated with them, have largely deprecated the explanation that the COVID disease or "long COVID" is the cause of those deaths. The young have often died suddenly from myocarditis and pericarditis, on the sporting fields or in their sleep, after mRNA injections, but without any signs of infections [29].

An analogy to the current COVID-19 pandemic is the 2009 "Swine flu" pandemic due to the H1N1 influenza virus. Then, as now, the pandemic was called, based not on fact, but on expectations of a highly infectious and very deadly disease projected by the Oxford computer models. The main difference is that the 2009 "pandemic" was never allowed to be transformed to an iatrogenic pandemic and it quickly died out on its own accord, amounting ultimately to a weaker form of the seasonal influenza. The episode had more cases worldwide, but fewer deaths (about 18,000) and a much lower case fatality rate than a seasonal flu [30]. On an excess mortality definition, the 2009 "Swine flu" season was not a pandemic.

The main difference between then and now is that mass "vaccination" did not play a significant role in 2009, thus avoiding an iatrogenic pandemic, as now. In 2009, production of "vaccines" and their injections into the population were not fast enough or widespread enough before the "Swine flu" infections died out on their own accord.

Between 2009 and 2020, governments were "educated" for "pandemic preparedness", which meant preparation for legally declared emergency measures, unimpeded by the "speed of science". For example, lockdowns were enforced everywhere without scientific justification [16], which also had the effect of preventing the development of herd immunity from isolation thus prolonging the period of infection. In the extended time available, "vaccines" were developed under "Operation Warp Speed" and rushed to the market, side-stepping standard procedures of longer-term testing to ensure safety.

The analogy to the 2009 swine flu is that the COVID-19 pandemic might not have continued or even existed (e.g. as the 2003 SARS outbreak), had there not been mass mRNA injections to cause and perpetuate the COVID-19 pandemic.

Bradford Hill Analysis

Austin Bradford Hill suggested [4] his nine "viewpoints" or aspects to be considered for causality. He did not call them "criteria", which have been used in this paper for simplicity and convenience. Bradford Hill refrained from calling them nine criteria, because they are neither necessary nor sufficient conditions to make hard and fast decisions on causality. They are aspects to address when examining alternative causal hypotheses.

In science, the set of available facts at any time determines what is the best explanation and Bradford Hill has suggested some

objective aspects to help deciding on alternative explanations. This paper has reported some highly significant facts which may not have been recognized yet. The significant facts have come from epidemiological data when they have been presented without obfuscation by manipulation and classification, as in official "health authority reports."

Previous sections of this paper have been devoted to addressing Bradford Hill "criteria" for assessing the iatrogenic hypothesis for Australian excess mortality since 2021. The analysis in previous sections is summarized in Table 2.

Table 2

Criterion	Evidence	Comment
1. Strength	Section 4, Figure 8	Monthly correlation between doses of injections and excess deaths at +74%
2. Consistency	Section 4, Figure 9; Section 5, Figure 10	Strong correlations between injections and excess deaths exist over time and across many countries.
3. Specificity	Section 5, Figure 11	Iatrogenic excess deaths have few other competing explanations, with the "vaccinated" having higher mortality risk than the "unvaccinated".
4. Temporality	Section 4, Figures 6 & 8	Consistent five-month lag of excess deaths following COVID injections.
5. Biological gradient	Section 4, Figure 9	Consistent dose-response relationship found in data.
6. Plausibility	Section 6	Abundant research indicates the injections suppress immunity. Antibody class switching from IgG3 to IgG4 leads to non-neutralization of spike proteins.
7. Coherence	Section 6	Neither the safety signals found here, nor the suggested underlying pathology contradicts any existing facts.
8. Experiment	Section 7	Autopsies show the pathology of spike proteins produced explicitly by mRNA injections.
9. Analogy	Section 7	Swine flu 2009 petered out naturally without mass "vaccination".

The main contributions to existing knowledge of the Australian COVID-19 pandemic are contained in sections 5 and 6, where the first five Bradford Hill criteria are addressed. These criteria are probably foremost because they apply equally to "hard sciences" such as physics. Criteria 6 to 9 are reviewed in Sections 7 and 8 through existing literature, which can be seen to support generally the iatrogenic hypothesis advanced in this paper.

On the basis that the Australian pandemic is iatrogenic which caused the observed excess mortality, then it follows also that harm, or risk of harm, outweighs any benefit of the COVID injections. This can be shown formally by the equation for mortality risk and benefit which is expressed as follows:

Lives lost (L) from side effects of injection
- Lives saved (S) from disease mitigation
= Excess Deaths (X)

or $L\text{-}S = X$. Excess deaths X are known to be large, but L and S are unknown from the data. Since $X >> 0$, it follows that $L\text{-}S >> 0$ or $L >> S$, hence $L/S >> 1$. A mortality risk/benefit ratio which may be defined by L/S, is very high.

Therefore, due to the very large excess deaths following Australia's policy of mass COVID injections, lives lost far exceed lives saved; the mortality risk/benefit ratio is very high. Further research is needed to quantify this ratio for health authorities.

Conclusion

Australian health policy has been based on misinformation from flawed COVID-19 data which are scientifically unsound. Based on sound mortality data, the Australian COVID-19 pandemic did not begin until the advent of mass mRNA injections in 2021. It is ironic that mass injections which were introduced to mitigate a non-existent pandemic, created a real iatrogenic pandemic. This study, backed by a Bradford Hill analysis, has shown that more injections administered to reduce the pandemic, had the opposite effect of causing more excess deaths to increase the pandemic.

The very large excess deaths observed from the data imply that the mortality risk/benefit ratio from COVID injections is very high. That is, the harm or risk realized has far outweighed any benefit from COVID injections.

This study has introduced a very simple, but robust, methodology, which should be used by other countries, particularly those in Figure 10 which appear to have adequate data, to replicate and investigate the likely iatrogenic origins of their own pandemics. Billions of lives in the world are at stake from the potential findings of the research.

References

1. World Health Organization. WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020, News releases. Retrieved from: https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-

covid-19---11-march-2020 (accessed 23 January 2023)
2. World Health Organization. Pandemic Preparedness, Communicable Disease Surveillance & Response (CSR), 2 February 2003. Retrieved from: http://web.archive.org/web/20030202200410/http:/www.who.int/csr/disease/influenza/pandemic/en/index.html
3. Roos R. Pfizer exec laughs when asked whether they knew their product stopped transmission prior to release. Retrieved from: https://www.youtube.com/watch?v=2YagXbprzFE
4. Hill, A. B. (1965). The environment and disease: association or causation? Proceedings of the Royal Society of Medicine (1965) 58, 295–300.
5. Centers for Disease Control and Prevention. CDC 2019-Novel Coronavirus (2019-nCoV) Real-Time RT-PCR Diagnostic Panel, FDA News Release. Retrieved from: https://www.fda.gov/media/134922/download
6. Centers for Disease Control and Prevention. 07/21/2021: Lab Alert: Changes to CDC RT-PCR for SARS-CoV-2 Testing, CDC's Laboratory Outreach Communication System (LOCS). Retrieved from: https://www.cdc.gov/locs/2021/07-21-2021-lab-alert-Changes_CDC_RT-PCR_SARS-CoV-2_Testing_1.html
7. Ni, M., Xu, H., Luo, J., Liu, W., & Zhou, D. (2021). Simultaneous detection and differentiation of SARS-CoV-2, influenza A virus and influenza B virus by one-step quadruplex real-time RT-PCR in patients with clinical manifestations. International Journal of Infectious Diseases, 103, 517-524.
8. Sy W. Mortality risk of COVID-19 injections: evidence from New South Wales and England, Academia, 30 July 2022. Retrieved from: https://www.academia.edu/83924771/Mortality_risk_of_COVID_19_injections_evidence_from_New_South_Wales_and_England
9. Sy W. Data reporting flaw in plain sight distorting COVID-19 mortality statistics, Academia, 25 August 2022. Retrieved from: https://www.academia.edu/85597731/Data_reporting_flaw_in_plain_sight_distorting_COVID_19_mortality_statistics
10. Australian Bureau of Statistics, Provisional Mortality Statistics, Released 22/12/2022. Retrieved from: https://www.abs.gov.au/statistics/health/causes-death/provisional-mortality-statistics/jan-sep-2022
11. CovidbaseAU, Australia COVID-19 Vaccinations. Retrieved from: https://covidbaseau.com/vaccinations/
12. Australian Bureau of Statistics, Causes of Death, Australia, Released 24/06/2020 and 29/09/2021, Retrieved from: https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia
13. Department of Health. Supporting our Hospitals – COVID-19 pandemic response. Australian Government Budget 2020-2021. Retrieved from: https://www.health.gov.au/sites/default/files/documents/2020/10/budget-2020-21-supporting-our-hospitals-covid-19-pandemic-response.pdf
14. Event 201, Public-private cooperation for pandemic preparedness and response, Recommendations. Retrieved from: https://www.centerforhealthsecurity.org/our-work/exercises/event201/recommendations.html
15. Kulldorff M, Gupta S and Bhattacharya J, The Great Barrington Declaration. Retrieved from: https://gbdeclaration.org/#read
16. Herby J, Jonung L and Hanke S, A Literature Review and Meta-Analysis of the Effects of Lockdowns on COVID-19 Mortality, Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise. Retrieved from: https://sites.krieger.jhu.edu/iae/files/2022/01/A-Literature-Review-and-Meta-Analysis-of-the-Effects-of-Lockdowns-on-COVID-19-Mortality.pdf
17. OpenVAERS, VAERS COVID Vaccine Mortality Reports. Retrieved from: https://www.openvaers.com/covid-data/mortality
18. Lyons-Weiler, J. (2020). Pathogenic priming likely contributes to serious and critical illness and mortality in COVID-19 via autoimmunity. Journal of translational autoimmunity, 3, 100051.
19. Wen, J., Cheng, Y., Ling, R., Dai, Y., Huang, B., Huang, W., ... & Jiang, Y. (2020). Antibody-dependent enhancement of coronavirus. International Journal of Infectious Diseases, 100, 483-489.
20. Ricke, D. O. (2021). Two different antibody-dependent enhancement (ADE) risks for SARS-CoV-2 antibodies. Frontiers in immunology, 443.
21. Irrgang, P., Gerling, J., Kocher, K., Lapuente, D., Steininger, P., Habenicht, K., ... & Tenbusch, M. (2022). Class switch towards non-inflammatory, spike-specific IgG4 antibodies after repeated SARS-CoV-2 mRNA vaccination. Science immunology, eade2798. (2023) 27 January 2023.
22. Mathieu, E., Ritchie, H., Rodés-Guirao, L., Appel, C., Giattino, C., Hasell, J., ... & Roser, M. (2020). Coronavirus pandemic (COVID-19). *Our World in Data*. OurWorldInData.org. Retrieved from: https://github.com/owid/covid-19-data/tree/master/public/data
23. Polack, F. P., Thomas, S. J., Kitchin, N., Absalon, J., Gurtman, A., Lockhart, S., ... & Gruber, W. C. (2020). Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine. New England journal of medicine, 383(27), 2603-2615.
24. Calafiore S, GPs face $20k fines for using serology tests to diagnose coronavirus, AUSTRALIAN DOCTOR NEWS, 15/04/2020. Retrieved from: https://www.rcpa.edu.au/Library/COVID-19-Updates/COVID-19-Useful-Resources/Docs/GPs-face-$20k-fines-for-using-serology-tests-to-di.aspx
25. Wu F, Zhao S et al. Severe acute respiratory syndrome coronavirus 2 isolate Wuhan-Hu-1, complete genome, National Library of Medicine, NCBI Reference Sequence: NC_045512.2. Retrieved from: https://www.ncbi.nlm.nih.gov/nuccore/NC_045512
26. Hansen, T., Titze, U., Kulamadayil-Heidenreich, N. S. A., Glombitza, S., Tebbe, J. J., Röcken, C., ... & Wilkens, L. (2021). First case of postmortem study in a patient vaccinated against SARS-CoV-2. International Journal of Infectious Diseases, 107, 172-175.
27. Hirschbühl, K., Schaller, T., Märkl, B., Claus, R., Sipos, E., Rentschler, L., ... & Wylezich, C. (2022). High viral loads: what drives fatal cases of COVID-19 in vaccinees?–an autopsy study. Modern Pathology, 35(8), 1013-1021 . Publications of Doctors for COVID Ethics, August 19, 2022. Retrieved from: https://doctors4covidethics.org/

vascular-and-organ-damage-induced-by-mrna-vaccines-irrefutable-proof-of-causality/
28. Palmer, M., & Bhakdi, S. (2022). Vascular and organ damage induced by mRNA vaccines: Irrefutable Proof of sality. "Publications of Doctors for COVID Ethics, August 19, 2022. Retrieved from: https://doctors4covidethics.org/vascular-and-organ-damage-induced-by-mrna-vaccines-irrefutable-proof-of-causality/"
29. Schwab, C., Domke, L. M., Hartmann, L., Stenzinger, A., Longerich, T., & Schirmacher, P. (2022). Autopsy-based histopathological characterization of myocarditis after anti-SARS-CoV-2-vaccination. Clinical Research in Cardiology, 1-10.
30. Klemm, C., Das, E., & Hartmann, T. (2016). Swine flu and hype: a systematic review of media dramatization of the H1N1 influenza pandemic. Journal of Risk Research, 19(1), 1-20.