

TMJ Blogs

No case for avoiding vaccination against COVID-19 based on alleged lack of vaccine efficacy

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Widespread uptake of vaccination against SARS-CoV-2 infection is limited by a minority in the population who decline to be vaccinated. The proportion varies between centres, and several reasons for non-vaccination exist or are stated. These include social reasons, especially (in Australia) in remote indigenous communities; medical reasons in patients with impaired immunity and like diseases; distaste at administration of foreign compounds and other forms of disagreement with the principles of vaccination; and disbelief that in the case of COVID-19 the vaccines are effective, often conjoined with the belief that the vaccines are deliberately toxic or introduce toxic substances into the body. The Journal supports the right of individuals to decline vaccination and with few exceptions (for example, in aged care facilities) has strong reservations over linkage of non-vaccination with discontinuation of employment. I have discussed human rights issues in a previous article. But we have no doubt that anti-COVID vaccination benefits both individuals and the community and should be positively embraced.

The evidence that anti-COVID vaccination is effective is already overwhelming, to the extent that the contrary belief is unreasonable. The evidence exists at microbiological, clinical and epidemiological levels. Some key papers supporting this statement has been cited in earlier Journal articles.(1,2) We acknowledge that vaccine effectiveness depends on the predominant strain of SARS-CoV-2. For example, it is already clear that the Omicron strain requires triple vaccination for control. The most recent authoritative reports of vaccine effectiveness have been published by the Center for Disease Control and Prevention (Atlanta, GA), one of the major operating components of the US Department of Health and Human Services.(3,4) One can do no better than quote the gist of the two reports, taken from the News Release:(5)

During Omicron, COVID-19-associated hospitalization rates increased for all adults, regardless of vaccination status, but rates were 12 times higher among adults who were unvaccinated compared to adults who received a booster or additional doses...Additionally, mRNA vaccines continued to be highly effective at protecting against COVID-19-associated ventilation or death, including during the Omicron period. Protection was highest in adults who received a third vaccine dose, reducing the risk for COVID-19-associated ventilation or death during the Omicron period by 94%.

The protection against death or ventilation was similar for both omicron and delta strains, but as is already known, protection against Omicron is enhanced when three doses of vaccine have been given. Further details are in the two reports.(3,4) The bottom line is that the data reported by the CDC demonstrates, in a real world situation, the undoubted effectiveness of vaccination against the consequences of SARS-CoV-2 infection. Continued belief to the contrary is unreasonable.

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References

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