## DOI: 10.5742/MEWFM.2021.94192

Professor Mark Spigelman BSc(Hons) MBBS FRCS(London) Macquarie University Sydney NSW 2019 Australia

28th November 2021

## Covid-19 immunisation in Refugee Camps.

Our immune system is unique to each individual depending on stimuli it receives during a person's life. The immune system response to vaccination may be affected by many factors such as age medical therapy and co-morbidities. Of particular importance may be the presence at the time of vaccination of unrelated infections and infestations that can act to prevent a proper antibody response to any immunisation.

A few years ago, whilst lecturing to an International Master of Public Health course at the Hebrew University in Jerusalem. As part of my role I was asked to supervise a student project entitled " Problems with Poliomyelitis vaccinations in India". As we discussed the timing of the second injections required one member of the group a doctor from India working in Public health commented that they often give the 3 or 4th doses of vaccine before their patients get an adequate antibody response. Noting that the recipients often have a number of co-morbidities particularly infection and infestations engaging their immune system thus distracting the system from fully responding to the stimulus of the added vaccine.

This situation is particularly applicable to the many refugee camps and millions of refugees scattered throughout the Middle East the result of the current round of conflicts in Syria, Iraq and Libya affecting not only these countries but also Turkey, Jordan and Lebanon.

As the current Omicron variant has shown variants of concern will arise wherever the Covid-19 virus is allowed to run rampant. The refugee camps would appear to be ideal breeding grounds for mass infections. It should be important that a vaccinations regime should be implemented as soon as possible. At the same time the problem of inadequate antibody response must be considered and a regime of testing the antibody response must be implemented this should be done within 3 - 4 weeks following the final vaccination either the 2 jabs such as AstraZeneca or similar vaccines or the one dose vaccines such as the Johnson and Johnson. Could be major problems and spread of the virus if patients who have been fully vaccinated were allowed free movement in the community yet have low or no resistance to the virus making them dangerous super spreaders.

As well the oral vaccine developed in Israel currently being trialed in South Africa would be ideal in the camps where medical assistance is far from ideal.

Mark Spigelman BSc(Hons) MBBS(Sydney) FRCS(London) Honorary Professor Macquarie University Sydney Australia Formerly Visiting Professor The Kuvin Centre for the Study of Infectious and Tropical Diseases Hebrew University Medical School Jerusalem Israel.