Vaccination
Quo Vadis?

Evidence has it that the multi-organ effect of Sars-CoV-2 is primarily attributed to hypercytokinemia, especially in the elderly & immunocompromised. Malta has suffered the brunt of this. According to the European Centre for Disease Prevention and Control, as of 30 September 2020, the 14-day cumulative number of Covid-19 deaths per 100,000 was 3.6 for Malta, topping the EU/EEA charts. If Covid-19 excess deaths were factored in, Malta would possibly fare better; nonetheless Malta is facing a serious problem stemming from the ingrained laissez-faire attitude of the general public.

We also have not fully comprehended this +ve-sense RNA virus including immunogenicity-related issues. The frequency of re-infections is unknown ... whether the presence of antibody changes susceptibility to subsequent infection or how long antibody protection lasts are not clearly understood. Further to this, the long-term sequelae are still unknown and only time will tell ...

It seems that the only hope relies on the SARS-Cov-2 vaccine. Quite possibly by Q1 of 2021 specific categories of people, including the vulnerable and selected groups of frontliners, would have access to the vaccine and in the ensuing months, offered to rest of the Maltese population in a staggered risk-based approach. Cornerstone to this is the premise that one should vaccinate with a view to prevent Covid-19 excess deaths and mitigate long term negative economic impacts. However, one must realise that the achilles heel may well be the supply of raw materials, such as glass vials. And before one begins to rub hands with glee, no-one really knows whether one shot will be enough or if boosters will be required, especially in the pediatric cohort. Let us not forget that there is a good proportion of children who are immunologically naïve to the seasonal influenza and other vaccines which have been purported to prime the immune system for SARS-Cov-2. At the other end of the spectrum we have the elderly. Will the proposed vaccine be effective in the elderly with their aged immune systems and co-morbidities? According to the CDC, people aged 30-39 years have a 4x death rate compared to the 18-29 age cohort and this rises to 630x death rate for those above 85 years of age [unadjusted rate ratios].

Against this backdrop each and every person living in the Northern hemisphere is faced with the question as to whether one should have the influenza vaccine for the upcoming Winter season. We will most probably not have such a dilemma next year since my guess is that any SARS-Cov-2 vaccine will incorporate the seasonal flu vaccine. It may be the fact that the Northern hemisphere, including Malta, may experience less cases of influenza cases during the upcoming Winter. This may not stem solely from the swiss cheese model of risk mitigation i.e. mask-wearing, social distancing, hygiene and rapid testing. There has been, in fact, a lower incidence of influenza during the Winter season between May and October in the Southern Hemisphere which could well translate into fewer cases being imported to the Northern Hemisphere.

Let us not lower our guard. We as care givers have a social and moral obligation to become vaccinated and promote such practice. Policy makers on the other hand need to implement systems ***and enforce*** them with a view to safeguard the general population, especially the most vulnerable patients. Much is at stake ...

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