

COVID-19 and the anti-vaxxers

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As 2020 enters the annals of public health as the year of the COVID-19 pandemic, we are marking a new scientific era in which science has come of age. This is exactly 100 years after the Great Influenza of 1918/1919 which accounted for between 50 and 100 million lives and which itself defined the advent of the new discipline of virology.¹

In the intervening years, a succession of novel viruses including HIV, Avian flu, SARS, Swine flu and Ebola have made an appearance on the world stage but until now the process of developing vaccines to counter them has been protracted and largely unsuccessful. The amazing achievements of global scientific collaboration during the current emergency will surely be celebrated for many years to come, presumably with Nobel prizes for those at the forefront.

However, if the experience of the pandemic teaches us anything it is that while modern science is a fabulous gift, the traditional public health environmental and hygiene measures that served us so well during the cholera years of the 19th century remain the foundations of an effective response to pandemics 200 years later. It also reminds us that in this age of scientific rationality, superstition and anti-science still run deep. At the very time when we should be applauding, the voices of the anti-vaxxers have found new breath, fuelled by the breakdown of trust between governors and governed, the rise of ‘fake news’ and the amplifying impact of social media.

In recent years, we have become accustomed to a slow rise in vaccine scepticism that was given a boost by Andrew Wakefield, and his assertions of the association of autism with immunisation with Measles, Mumps and Rubella vaccine.² We had previously also had to stand by and watch as misleading propagandists undermined the evidence-based measure of water fluoridation to benefit population dental health.³ What is now of concern is whether those opposed to the new COVID-19 vaccines will be able to prevent the effective implementation of a vaccine programme that should enable us to emerge from the dark tunnel of nature’s latest throw of the dice.

Organised efforts to prevent vaccination have, in fact, a long history, dating back to opposition to smallpox vaccination with the foundation of the national Anti-Vaccination League in 1866.⁴ Vaccination against smallpox had been made mandatory for all newborn children in Britain in 1853 and although not initially rigidly enforced was later pursued more systematically subsequent to an epidemic in 1864–1868. Following a number of severe and fatal side effects of vaccination, medical and ethical opposition began to grow, with Leicester being one of the leading towns for the establishment of an anti-vaccination league and in 1885 was the scene of a huge demonstration made up of representatives of Anti-Vaccination Leagues from other towns. Despite the support of prominent physicians, Leicester Radical members of parliament won the battle for a Royal Commission which led to the abolition of compulsory vaccination.

At this time when an overwhelming majority of the public welcomes the arrival of the COVID-19 vaccination, it is salutary to remind ourselves of the main arguments deployed against its value and use. In addition to, perhaps readily understood fear of injections, other objections have included that vaccination is ‘un-Christian’ (and presumably other religions), that it is an infringement of personal liberty and that it is part of a more general suspicion of scientific medicine; this latter having perhaps been reinforced by the rush to approve the COVID-19 vaccine for public use and the apparent UK political desire to be the first out of the blocks in contrast to our European neighbours. This despite the first approved vaccine having been developed in Germany in collaboration with USA Pharma.

To risk the trust of the public for the sake of a couple of weeks’ propaganda advantage could prove to be unforgivable should vaccine uptake fall below that required for the ubiquitous ‘herd immunity’ as a result of giving oxygen to the sceptics.

The Victorian experience reminds us that compulsory vaccination must surely be a last resort and that

taking the public on a journey hand-in-hand with this wonder of modern science is so dependent on that trust, and on a government and medical establishment that leads with openness, transparency and candour.

Let us hope that in 2021 rationality triumphs over superstition and that we emerge in spring into the sunlit uplands of a post COVID-19 year having learned the lessons from how Corona ruined the country's health and wealth.⁵

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