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Letters on Urgent Issues

COVID-19 vaccines: Getting Anti-vaxxers involved in the discussion

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ABSTRACT

As studies continue into the development of a vaccine for COVID-19, research to understand and address the concerns raised by anti-vaxxers about vaccinations should also be undertaken in tandem. Using the experience of Samoa, which was recently impacted by a measles epidemic, the authors discuss the importance of vaccination to developing countries and the devastation that can be wrought by vaccine-preventable diseases. There are fewer laws on vaccination of adults when compared to those applicable for children, and not all countries have mandatory vaccination laws in place. With increasing anti-vaxxer rhetoric towards the COVID-19 vaccine that is currently in development, the focus has been on reducing the spread of the misinformation through penalties or company interventions, but less so on addressing the underlying concerns of the anti-vaxxer community. The authors suggest that involving anti-vaxxers in the discussion is critical to the acceptance and uptake of the vaccine to COVID-19 when it becomes available.

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Current innovations using an RNA based genetic material in vaccine developments for COVID-19 could offer merits in momentum and scalability if successfully tested. (Leaky, 2020) Despite the lack of a specific delivery time for the availability of potent vaccines, laboratories worldwide are in a race to develop a vaccine for COVID-19, with governments exercising containment and mitigation strategies to slow down the spread of the disease. For countries with under resourced health systems, limited water supply, suboptimal sanitation and hygiene facilities, and aging populations, the ability to vaccinate against COVID-19 would be cause for public health celebration. Acceptance of the vaccine is important to its success and with the rise of the anti-vaxxer movement, increasing public education and awareness is urgently needed. Samoa can be used an example of the impact of a vaccine preventable disease on an under vaccinated population, there were 81 reported deaths and 5,675 reported cases (Outbreak, 2019) of measles from an epidemic in 2019.

Although no inquiry into the government's management of the outbreak was approved or conducted, several weaknesses were highlighted in the public media. These included delays in declaring the outbreak and state of emergency, unavailability of measles diagnostic tests locally, poor communication and leadership, lack

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of a decentralized vaccination response and among some the cultural preference for traditional healers. Additional significant challenges were the misinformation on vaccinations that was largely promoted by anti-vaxxers on social media; and public mistrust after the tragic deaths of two babies one year earlier after receiving a mixture of the MMR vaccine and an expired anesthetic (Infant deaths in Samoa, 2020). Although the deaths were found to be due to human error, the combination of misinformation and mistrust contributed in part to people seeking medical attention and treatment late. In response to anti- vaxxer promotion activities, the government imposed fines and potential jail penalties for persons who actively attempted to dissuade people from receiving vaccines. One person was charged with incitement against the Samoan Government's vaccination order and the case will be seen by the courts later in 2020. (Kerr, 2019) Unfortunately, penalties do not change anti-vaxxer sentiment but drive the discussion underground, with studies indicating that social networking applications such as Facebook can be used to spread misinformation. (Smith & Graham, 2017)

To stem the epidemic, the government implemented a mass vaccination campaign across Samoa in December 2019 and to raise vaccination coverage, the Infant's Amendment Bill (No. 2) 2019 was enacted in December 2019. It requires the presentation of a valid vaccination record for children to register for school, the law does not apply to adults. The rules on vaccination vary from country to country, some with mandatory vaccination, others without mandatory vaccination policies. Especially for adults

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who are not covered under the legal requirement for vaccination of children, studies are needed on the level of public acceptance for mandatory vaccination for COVID-19 and interventions on how to tackle the underlying anti-vaxxer sentiment that still exists.

The discourse on mandatory vaccination is passionate, with divisive stances, in support or against the policy; discussion on vaccination about COVID-19 has already started on social media platforms (Klepper and Dupuy, 2020). On anti-vaxxer platforms, be them in person on or the internet, the misinformation about side effects about vaccinations being linked to autism and toxins in the vaccines themselves (Hoffman et al., 2019)is mixed with exaggerations of the documented reports of side effects such as cases of narcolepsy after receiving the H1N1 vaccine (Lundgren, 2015), minimizing the benefits of vaccinations. The confluence of information is difficult to sift through, to separate factual grounded guidance from misinformation, potentially influencing the decision to vaccinate or not. Similar challenges are now emerging with the anti-masker communities, which are more visible on the United States media (DW News, 2020). More is urgently needed to address the knowledge gap and concerns of the anti-vaxxer community as mistrust and fear fall within "what people think and feel" and "social processes" of the World Health Organization's increasing vaccination model (WHO, 2020), both contributing to vaccine hesitancy. To aid in the effort of reducing misinformation in the public space, social media platforms and internet companies need to take a more active role to remove misinformation or at least make it more difficult to find. Within an intersectional approach, fostering civil dialogue is critical, standing alongside improved education on how vaccines function and the improved understanding of associated minimal risks, research on social and behavioral interventions, skills in identifying misinformation and transparency and accountability within the vaccine development process. The development of the COVID- 19 vaccine is an unknown time away, but involving the anti-vaxxer community now is imperative to high vaccine acceptability when it is discovered.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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