SP-005

Malaysia as hub for SARS-CoV-vaccine production

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ABSTRACT

Summary: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) emerged in China in 2019 and has caused a pandemic with half a billion infections and 6.46 million deaths. The accelerated development of current mRNA, viral vectored, and inactivated vaccines against SARS-CoV-2 utilized the S protein of the SARS-CoV-2 Wuhan strain. However, emergence of SARS-CoV-2 variants of concern (VOCs) with numerous mutations in the S protein considerably reduced the protective efficacies of current vaccines. Novel vaccines which utilize the mRNA or the viral-vectored vaccine have to be engineered to carry the S protein genes from the Omicron BA.4 or the BA.5 subvariants. Experimental vaccines in the Malaysian vaccine developmental landscape are the (i) modular mucosal vaccine produced in GRAS, (ii) NDV-based vaccine expressing RBD, and (iii) live attenuated Vibrio cholerae to deliver SARS-CoV-2 antigen. Next-generation vaccines that contain highly immunogenic and conserved epitopes capable of providing broader and long-lasting protection should be considered.

SP-006

Using design research to improve digital health technologies

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ABSTRACT

Summary: Digital health technologies have the potential to reduce health disparities, when well-designed. However, they can also exacerbate inequities due to challenges like digital literacy, access to mobile phones and data, and cultural or linguistic fit. Therefore, including the target community in the design process is extremely important and can lead to more effective digital health technologies. Design research methods help to uncover the community's true needs and design technologies that address those needs, improving health and addressing equity issues along the way. Specific design research methods will be described in the context of studies of digital health technologies.