

Experts call for caution

'Mixing vaccines can be done after in-depth studies'

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PETALING JAYA: As the government is looking into studies of mixing different Covid-19 vaccines, health experts believe that this may be needed in the long run.

But they also think that more scientific and clinical trials are needed first.

Universiti Malaya epidemiologist Prof Datuk Dr Awang Bulgiba Awang Mahmud believes that mixing and matching vaccines called heterologous prime-boost, may be required for the long term.

The reason for this, he said, is because some vaccines might not be effective enough to substantially reduce transmission or serious disease rates and that there might be an insufficient degree of herd immunity due to vaccine hesitancy caused by adverse publicity for some vaccines.

Prof Awang added that some vaccines might also not be effective enough against newer variants.

"Vector immunity may also develop in viral vector-based vaccines, thereby rendering the vectors ineffective in delivering the spike protein code into human cells while some



Making a point: Prof Awang (left) and Prof Sazaly believe more trials should be done before authorities carry out the mix-and-match approach.

vaccines may also be unsuitable for some people due to severe side effects," he said when contacted yesterday, adding that there is currently an ongoing study in the United Kingdom called Com-Cov that researches whether the heterologous prime-boost approach will work.

Once the study is completed, Prof Awang said it would be useful in helping nations decide whether mixing vaccine doses would work.

The vaccines in this trial are AstraZeneca, Pfizer, Moderna and Novavax.

Prof Awang, meanwhile, noted that the Independent Covid-19

Vaccination Advisory Committee headed by him had also recommended to the government to set up a Voluntary Covid-19 Vaccination Registry in which a total of 50,000 vaccine recipients should be recruited as volunteers and followed up for two years.

On Wednesday, National Covid-19 Immunisation Programme coordinating minister Khairy Jamaluddin said that the government was looking into the approach of mixing two different vaccines.

He stated that heterologous vaccination, a method of using two different vaccines to boost efficacy against different variants, based on real-world data from Germany using AstraZeneca for the first dose and Pfizer-BioNTech as the second dose, had so far shown to have boosted neutralising antibodies and were more effective against different variants.

Universiti Putra Malaysia medical epidemiologist Assoc Prof Dr Malina Osman said based on studies done so far, mixing the vaccines provided a "better immune response".

"It also provides a better shield towards variants. It is a good strategy to overcome a possible shortage of vaccine supplies and allow the

vaccination process to continue," she said.

Universiti Malaya virologist Prof Dr Sazaly Abu Bakar said scientific data and proper clinical trials are needed, especially when both the AstraZeneca and Pfizer-BioNTech vaccines were developed on different platforms; the viral vector and the mRNA (messenger ribonucleic acid), respectively.

"We can't just rely on data from Germany. If not we can say the same about Ivermectin (an anti-parasite medication) – that there is also data from India and Mexico that suggests that using it is good.

"With this reasoning, if we are going to allow the usage of a vaccine that is not by its recommended method, then the Health Ministry must also be fair to alternative treatments for Covid-19 that have a scientific basis," he said.

Prof Sazaly noted that the mixing of different vaccines was "never the intention of the vaccine manufacturers". As such, he cautioned against entertaining such a notion.

He said the mix-and-match happened not because people were experimenting with it but due to certain countries having run out of vaccines.