

'Explain to rakyat how vaccine works'

Experts: Govt should launch awareness campaign to be transparent on safety

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PETALING JAYA: Health experts are urging the government to come up with a vaccination awareness campaign now to alleviate public fears and concerns over the Covid-19 vaccine with the arrival of the first batch by February.

Universiti Malaya expert virologist Prof Dr Sazaly Abu Bakar said through a campaign, the government should explain how the vaccine actually works.

"What we do not want is the ripple effect after this in which not only the Covid-19 vaccine is affected but also vaccines for other infectious diseases which we have been using for eons.

"Anti-vaxxers are trying to sow distrust on vaccines. It is not just about the Covid-19 vaccine but their aim will be affecting all the other childhood disease vaccinations which is not good," he said when contacted yesterday.

He explained that a vaccine can only enter the country after the National Pharmaceutical Regulatory Agency (NPRA) approves it although the government has made allocations to purchase the vaccine.

"The vaccine cannot be brought in and distributed to the people until the NPRA has verified that it is safe to use.

"The rakyat should not be concerned about all these other issues that are non-scientific, non-science-based and non-data-based. What the rakyat should know is that there are different platforms for different vaccines.

"This is good because that means the government is giving us the option of choosing which vaccine

Facts about Covid-19 vaccines

Pfizer BioNTech

First batch: **to be delivered by February**

Quantity: **12.8 million doses**

Dosage: **2 doses, 3 weeks apart**

Coverage: **6.4 million people (20%)**

Known as the **BNT162b2**, it shows an efficacy rate of 95%

Based on the SARS-CoV-2 virus's genetic instructions to build the spike proteins which it uses to enter human cells

It uses **messenger RNA (mRNA)**, the genetic material our cells read, to make the spike protein

As mRNA molecules fall apart at room temperature, the vaccine has **to be kept and transported at -70°C** to be viable

Approved by the US' Food and Drug Administration

Oxford-AstraZeneca

First batch: **First half of 2021**

Quantity: **6.4 million doses**

Dosage: **2 doses, 4 weeks apart**

Coverage: **3.2 million people (10%)**

Known as **AZD1222**, 90% effectiveness, depending on the initial dosage. But, subsequent reports put it at around 70%

Based on the SARS-CoV-2 virus's genetic instructions to build the spike proteins it uses a double strand **DNA added to the adenovirus**, a virus that causes flu-like symptoms

Uses a **modified version of a chimpanzee adenovirus** and can enter cells but cannot replicate

DNA is not as fragile as RNA and doesn't have to stay frozen, expected to last for at least six months when refrigerated at 2°C to 8°C

Not yet approved by the US' Food and Drug Administration

Sinovac

Quantity: **14 million**

Dosage: **2 doses, 2 weeks apart**

Coverage: **7 million people (21.9%)**

Known as **CoronaVac**

An inactivated vaccine

Only information from the first and second phase trials of CoronaVac is available

Based on Phase One and Two trials, it found that the vaccine was "suitable for emergency use"

Phase 3 trial launched in Brazil, Indonesia and Turkey

It uses **killed viral particles** to expose the body's immune system to the virus without risking a serious disease response

It is considered a more traditional method of vaccine that has been successfully used in rabies

It can be stored in a standard refrigerator at 2°C to 8°C

Gamaleya

Quantity: **6.4 million**

Dosage: **2 doses, 3 weeks apart**

Coverage: **3.2 million (10%)**

Known as **Sputnik V** with an efficacy rate of **91.4%**

Made from a **combination of two adenoviruses, Ad5 and Ad26**, to avoid a situation in which the immune system could learn to recognise the vaccine as a foreign object that needs to be destroyed

Freezer storage and currently developing an alternative formulation that can be refrigerated



we want to take eventually as there are people who are allergic to certain components of a vaccine. Maybe when one vaccine is not suitable, another one is suitable," he said.

So far, the Health Ministry had implemented a nationwide survey to gauge the interest of Malaysians in getting the Covid-19 vaccine.

It was also announced that Prime Minister Tan Sri Muhyiddin Yassin would be among the first to take the vaccination.

Universiti Putra Malaysia medical epidemiologist Assoc Prof Dr Malina Osman said proper policy and regulation is needed to handle

vaccine skeptics and anti-vaxxers.

"Once we have bold scientific evidence on the effectiveness and safety of the vaccine, the gazettement under the law should be carried out to disallow those who have no authority to talk against the vaccine, and there should also be provision on an appropriate punishment for those who talk 'nonsense' about the vaccine," she said.

"In the Muslim community, the issue on whether the vaccine is halal or not have been raised by those who reject the vaccine. This group provides isolated evidence against the decree by recognised

religious scholars towards acceptance of the treatment from the Islamic point of view," she said.

Prof Dr Moy Foong Ming, from Universiti Malaya Faculty of Medicine's Department of Social and Preventive Medicine, concurred that a vaccination campaign should be set up while also being transparent on the safety, side effects and efficacy of the vaccine.

"The government should be transparent on the safety, side effects and efficacy of the vaccine. The total uptake and among sub-groups of vaccination should also be presented to the public.

"The media should publish equally on information of the efficacy and safety as well as the side effects of the vaccine.

"Clear explanation of why the side effects happen, who are the high-risk groups and what are the chances of a side effect that will happen should be presented to alleviate people's fears," she said, adding that relevant government agencies should address religious concerns.

Dr Moy added that highlighting the fact that "all vaccines and medicines have some side effects, including Covid-19 vaccine" should be emphasised to the public.