

Vaccines are powerful but not perfect tools

Why in news?

The buzz around the arrival of COVID-19 vaccine needs to be seen with a bigger picture.

Will vaccines be effective in breaking the transmission of the disease?

- Historically, in many diseases, vaccination models have failed to break disease transmission.
- Currently Moderna vaccine, AstraZeneca vaccine & Pfizer vaccine are waiting for regulatory clearances.
- AstraZeneca vaccine has shown 90% efficacy for two doses when compared to 70% for a single dose.
- Also it is unknown that post vaccination for how long does the immunity lasts, as significant number of patient's post-COVID infection have failed to show any antibodies against the virus.

What are the challenges of vaccinating people in a diverse country like India?

- Vaccination of a huge population in India is a mammoth exercise as it is dependent on a large number of socio-economic and biological factors.
- People differ in demographic variables, in nutritional status and in their biological responses to immunisation.
- There is also gender variability as boys generally receive higher vaccination coverage than girls- reported by most surveys conducted across the country for childhood immunisation.
- Poor nutrition in India is also found to be a significant cause of immunisation failure.
- Despite having a robust, well-integrated Universal Immunisation Programme (UIP), its coverage has never gone beyond 60-65%.
- How far we will be able to achieve a near 90% coverage with the COVID-19 vaccine is questionable.
- Also there will be gaps in the logistics of giving the vaccine to such a huge population & in service delivery.
- Therefore, evidence based informed policymaking regarding the vaccine, a transparent and uniform accountability system to monitor the vaccine

distribution and application is the need of the hour.

Source: The Indian Express

