## Vaccine related adverse event & strategy to handle it

January 5, 2021 In news

Recently, Finland confirmed 1st adverse reaction to Pfizer/BioNTech Covid-19 vaccine

## What is a vaccine-related adverse event?

- Any untoward medical event that follows immunization and that does not necessarily have a causal relationship with the usage of the vaccine.
- The adverse event may be any unfavourable or unintended sign, abnormal laboratory finding, symptom or disease
- Adverse events can range from minor side-effects to more severe reactions. They can be a cause of public concerns about vaccine safety.

## Categories of adverse events

As per WHO, An adverse event following immunization (AEFI) are divided in 5 categories. They are:

- Vaccine product related reaction: An AEFI that is caused or precipitated by a vaccine due to one or more of the inherent properties of the vaccine product.
- Vaccine quality defeat-related reaction: An AEFI that is caused or precipitated by a vaccine that is due to one or more quality defects of the vaccine product including its administration device as provided by the manufacturer.
- 3. Immunization error-related reaction: An AEFI that is caused by inappropriate vaccine handling, prescribing or administration and thus by its nature is preventable
- 4. Immunization anxiety-related reaction: An AEFI arising

from anxiety about the immunization.

 Coincidental event: An AEFI that is caused by something other than the vaccine product, immunization error or immunization anxiety.

What is the strategy to handle adverse events of the COVID-19 vaccine?

The World Health Organization(WHO) gives the following guidelines to handle an adverse event of COVID-19 vaccine

- At the time of vaccine introduction, all countries should at a minimum have an AEFI surveillance system in place as described in the Global Manual on Surveillance of AEFI 3
- The AEFI surveillance cycle (Fig 1) outlines the different steps in identification, notification, reporting, investigation, data analyisis, causality assessment and feedback following all AEFI, including AEFI following Covid 19 vaccine.

## Fig 1 AEFI surveillance cycle

