

## Fake COVID-19 vaccination in India: an emerging dilemma?

India, known to be the world's largest manufacturer and distributor of vaccines, started its free vaccine roll-outs against COVID-19 on 16 January 2021.<sup>1</sup> To administer vaccines to its 1380 million population, the National Expert Group on Vaccine Administration for COVID-19 was formed to overlook collaborations at national, state and district levels for effective vaccine dissemination and roll-out.<sup>1</sup> Despite these efforts, as of 4 July 2021, 4.6% of the population are fully vaccinated and 16.05% are partially vaccinated.<sup>2</sup> Among the eight vaccines that are currently under various clinical trials, initially only two were granted emergency use authorisation (EUA) by the Central Drugs Standard Control Organisation: (1) COVISHIELD by the Serum Institute of India and (2) COVAXIN by Bharat Biotech.<sup>1</sup> Sputnik V was later granted EUA in April 2021.<sup>3</sup> In the rising fear of the third wave, the country is accelerating its vaccination efforts. Amidst these efforts, there are surmounting allegations of people receiving fake vaccination in various parts of the country.

When the COVID-19 vaccine drive initially started, the INTERPOL had issued warning across its 194 member countries that this arena could be a prime target of criminal networks. Following this, in South Africa, 400 ampules, equivalent to 2400 doses, of fake COVID-19 vaccines were dismantled from a warehouse. A similar situation was seen in China when police seized more than 3000 fake vaccines.<sup>4</sup> When reports of fake vaccination surfaced in the Indian media, the country was shaken. Mumbai and Kolkata saw the most harrowing situation associated with this racket, which culminated to be part of an organised syndicate. In Mumbai at least 2053 people were given fake jabs of the vaccines at nine centres as part of vaccination drives/camps. An entire housing committee was scammed by fake vaccines and one hospital was even sealed for conducting a fake vaccination drive. A special investigation team was set up by the Mumbai Police which arrested several people. A similar situation was witnessed in Kolkata, where 800 people were duped with fake jabs. In the fake vaccination drive, there are suspicions that people received either expired vaccines, empty vials, saline water or

an antibiotic, amikacin, in place of the vaccine.<sup>5</sup>




When the CoWIN application (app) was announced to be launched in India as the application that handles registration and creates vaccine schedules, there were already fake CoWIN apps promising people with vaccination. After the launch, problems such as discrepancies in the information provided and slot allotments, server issues with freezing and crashing of the app revealed how unprepared the system was to keep up with the increasing user demand.<sup>6</sup> The app also did not address the estimated 18 million households in India that have no working mobile phones or access to the internet.<sup>7</sup> These loopholes provided an opportunity for fake vaccinators to target the vulnerable population. Some fake apps also led to malicious links trying to hack people's banking information. A report from McAfee, a software security company, stated that out of the 13 133 582 COVID-19-related malicious files detected worldwide, 883 884 were detected in India alone.<sup>8</sup>

Although the government has halted all other vaccination centres apart from government and private hospitals to tackle the situation, this slows down the process and new strategies are needed to better deal with this unprecedented crisis. There should be well-organised system and effective collaborations among various stakeholders to prevent these mishaps. All vaccines must be delivered from the Central Government vaccine stores. There tends to be a high prevalence of fake vaccines when the markets are unregulated and when private sectors are involved.<sup>9</sup> A minimum 70% efficacy is needed for the vaccines, and respective governments should conduct surveillance on the efficacy as well as the storage of vaccines,<sup>10</sup> so regulations need to be in place. Private vaccine centres could be allowed to purchase vaccines from the government but would still need to ask permission from the state health ministry and the local police so that proper records can be maintained. The invoice and the permission letters should be made available on request. QR code scan-based batch number registration (identification) in the government website should be made mandatory before opening a vial. QR code scanning can be incorporated into the CoWIN app as well. The state ministry should create a zonal vaccination daily data collection office, and monthly checks should also be done by state representatives and police officials. These private centres should have one doctor as a central officer. Oxygen supplies and

medications should be made available, along with an ambulance on stand-by for emergencies.

Vaccinator training programmes should be run by the government and valid certificates should be verified with the state government department website before enrolling individuals as vaccinators. Once vaccinated, patients should get a confirmation message at once and should be advised not to leave the centre until the message is received. The CoWIN app at present does not account for comorbidities and vaccine-associated adverse events. The app can be strengthened to incorporate data on demographics and adverse reactions. These data can be compiled and shared with the public to make the vaccination process more transparent and encourage more people to get vaccinated. In India the CBI coordinates with the INTERPOL and could implement strict law enforcement for perpetrators leading fake vaccination scams. A more structured and reliable system could streamline the process and prevent vulnerable populations from falling prey.

Fake vaccines, apart from giving false sense of security with heightened risk of exposure to the disease, endanger a person's health and may also erode trust in legitimate vaccination programmes and lead to vaccine hesitancy, nullifying efforts to reach mass immunisation. As the world is racing to get vaccinated to fight against the COVID-19 pandemic, fake vaccinations are slowing the pace and threatening the entire population. Organised planning, strong legislation and effective collaborations can help mitigate this crisis.

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