Webinar meeting report March 2021
What can we learn from leading COVID-19 vaccine programmes? An insider look at India and the UK
**Introduction**

Vaccines offer us hope to end this pandemic. In record time, a number of COVID-19 vaccines have been approved and are being administered to people around the world.

A successful vaccine rollout means countries must overcome a number of challenges including logistics, manpower and vaccine hesitancy.

India and the United Kingdom have claimed a spot in the top 10 countries with the highest number of COVID-19 vaccinations given to their populations. A webinar organised by the BMJ and the Asian Development Bank explored the key lessons that can be learned from these countries.

More than 750 people from 49 countries registered for the webinar and heard about the importance of a trained workforce, a strong IT system and collaboration between sectors.

Introducing the webinar, Dr Patrick Osewe, Chief of the Asian Development Bank’s Health Sector Group, said countries had set ambitious targets to vaccinate millions of people in 2021. He laid out six questions that must be considered when rolling out a successful COVID-19 vaccination programme:

- Who should get vaccinated first?
- How will the vaccine be allocated equitably?
- How will the vaccine be distributed?
- Who will administer the vaccine?
- How will first and second vaccine doses be tracked?
- How will adverse effects be monitored?

**Experience from the UK**

The UK has one of the highest vaccination rates globally, with more than half of adults having now received a first dose of a COVID-19 vaccine. As of 23 March, 28.3 million people in the UK have received a first vaccine dose and 2.3 million have had their second dose. The decision on who should get vaccinated first was made by the Joint Committee on Vaccination and Immunisation who set out nine priority groups. The highest priority group included residents in a care home and their carers followed by those over 80 years of age and frontline health and social care workers. The UK has now offered a first vaccine to the first eight groups and is currently offering a first dose to those in group 9 - people age 50 years and older - as well as administering second doses.

Dr Liz Avital, the Operations Lead at a large London vaccination centre, described how the facility was successfully set up in just 10 days. Situated in Camden, an inner city area of London, it serves a population with high levels of health inequality and cultural diversity. The centre sits within the footprint of a large tertiary hospital but is run by a group of general practices called a primary care network. “We have worked very closely as a team,” she emphasised. She described the practical considerations that need to be considered:

- How many people will be coming daily?
- How do they check in?
- How are they guided to the vaccination point?
- How long does it take for each person to be vaccinated?
- What workforce is needed?
- What computer system will be used to schedule appointments and keep track of vaccine doses?
Workforce

The centre vaccinates between 850 and 1000 people a day and can vaccinate each person in four minutes. They have nine vaccinators within the centre at any one time who work either a morning or afternoon shift. These include a clinical lead and two floating GPs or doctors. Dr Avital said it is important to consider the sustainability of the workforce. “When we started primary care was quieter so we relied more on general practice staff as vaccinators.” However, now that general practice is busier the centre uses more volunteers including retired doctors or nurses as well as dentists, pharmacists and medical students offering up their spare time. In addition, the St John’s Ambulance has been training up non-medics to be vaccinators. Pharmacists are also always on site plus an “army of volunteer marshals” to show people where to go. Dr Avital says they also realised they needed to have security personnel as sometimes people just turn up even though the centre is appointment based only.

Information technology

A good computer system is vitally important, Dr Avital told the webinar. In the UK the call and recall system for a COVID-19 vaccine is based on GP records. A text, phone call or letter is sent out and then an individual registers online for an appointment. Once a patient comes to the vaccination centre it is ticked off that they have had the vaccine, the batch number is recorded, and their GP record is automatically updated. “Having a strong IT system is really quite fundamental to record what vaccine has been had, when it has been had and importantly if there are any adverse reactions,” she said.

Encouraging uptake

The area that the vaccination centre serves has a large Bangladeshi population and a large Muslim population and at the beginning uptake wasn’t as high among these groups, Dr Avital said. In order to overcome vaccine hesitancy, the centre made sure vaccination leaflets were available in different languages. They also worked with community leaders and religious councils to encourage vaccine take up and carry out myth busting. “Having a diverse workforce also helps. We have a Somali nurse who has really encouraged people in her community to have the vaccine.” The centre is also running a pop up clinic in an area with a high culturally diverse population. Dr Avital told the webinar that some people attending the centre may be anxious or have needle phobia and it is important to address their concerns and make them feel comfortable. “If we make the experience in the centre as pleasant as possible then they will go back and spread the word to their friends and in their community,” she added.

Adverse events

In the UK any adverse events are reported to the Medicines and Healthcare products Regulatory Authority. Within the centre there is a resuscitation room and an anaphylaxis kit but they haven’t needed to be used so far. Dr Avital said within the centre they have had a couple of instances of tingling where the patient has been given an antihistamine and a couple of cases of people feeling faint, usually due to anxiety.

Experience from India

India started preparing very early for vaccine development and vaccine delivery, Dr Vinod Paul, Head of India’s COVID-19 task force, told the webinar. A vaccine task force was set up in March 2020 followed by a national group for vaccine administration to look at the practicalities of delivering vaccines. “We were very clear from the outset that we would be developing and manufacturing our own vaccines and also producing vaccines for the world.”

There are two COVID-19 vaccines currently licensed for emergency use in India. One, known as Covishield in India, was developed by AstraZeneca and Oxford University and is being manufactured locally by the Serum Institute of India. The second, Covaxin, was developed initially by the Indian Council of Medical Research and then taken on by Bharat Biotech, a vaccine maker. A number of other vaccines are also in phase II and phase III trials in India.
Who is being vaccinated?

India’s priority groups for vaccination are healthcare workers, individuals above the age of 50 years and those under 50 with comorbidities – making a total of 350 million people, Dr Paul said. India launched its vaccination drive on 16 January when it started vaccinating healthcare workers and frontline staff. From 1 March the eligibility criteria was expanded to include people over the age of 60 and those aged 45 to 60 with underlying illnesses.

India has given 39 million doses so far; 3 million of them Covaxin and 36 million Covishield. An average of 1.6 million doses are being given every day although some days the figure has topped 3 million. “We are picking up speed of vaccination by the day,” said Dr Paul. India is also supplying vaccines to the rest of the world and has already supplied 25 million doses to COVAX – the initiative which sends vaccines to lower income countries.

The rollout

The national government has worked closely with individual states in the vaccine rollout, Dr Paul told the webinar. Vaccine has been delivered to 39 000 facilities, some of which have more than one centre. The programme uses a combination of public and private facilities. Vaccination is free in a government facility. In a private facility an individual pays less than $4 but the government supplies the vaccine for free. Vaccines in India are usually given by a nurse and occasionally by a doctor. Dr Paul said India has a very strong IT backbone called CoWIN. This allows people to make appointments at a place of their choice.

Vaccine hesitancy

Dr Paul said there has been a concerted and multipronged effort to tackle vaccine hesitancy using media, appeals by eminent people, and photographs of people receiving the vaccine. “We had some vaccine hesitancy at the beginning but it has now melted away as more people were vaccinated and we saw practically no side effects.”

Adverse events

India tracks adverse events systematically and already had a robust system in place though their large scale childhood vaccination programmes. Dr Paul told the webinar that they have seen only a negligible incidence of adverse events. Out of the 36 million Covishield injections given there have only been 5000 adverse events reported and with the 3 million Covaxin there has been 324 adverse events. They are currently investigating around 280 more serious adverse events but have registered no increase in thrombotic events.

Detailed questions can be found in Appendix 1

Concluding remarks

“Learn from each other – share knowledge and experience. Not just on a one to one level but globally.”

Dr Liz Avital, Operation Lead for a vaccination centre in London

“You can set very ambitious targets and with very good organisation that brings together all sectors of society, these can be achieved. We have seen for example with India, the US, Israel and the UK that with a concerted effort, strong leadership, good organisation and resources you can vaccinate significant numbers of people in 2021 if the vaccines are available.”

Dr Patrick Osewe, Chief of the Health Sector group, Asian Development Bank

“Countries should invest in science. Create systems to work together in teams. International collaboration is important as the world is one family.”

Dr Vinod Paul, Head of the COVID-19 task force and National Institution for Transforming India (NITI) Aayog member

Key themes

Attendees from around the world posed valuable questions to the panel on strategies to encourage vaccine uptake, enhance deployment and the reporting of adverse events.
About the BMJ and ADB partnership

BMJ and the Asian Development Bank (ADB) launched the COVID-19 (Coronavirus): ADB Information Centre to support frontline health professionals manage patients with COVID-19, its relevant differential diagnosis and common comorbidities in real-time, at the point of care.

The Information Centre provides free access to digital health tools such as clinical decision support from BMJ Best Practice, accredited e-learning courses from BMJ Learning as well as patient information leaflets and procedural videos. Evidence on COVID-19 is rapidly changing and frontline healthcare professionals can benefit from trusted, evidence-based and continually updated international guidelines.

Appendix 1 Audience questions

Vaccine hesitancy

- Vaccine hesitancy and scepticism are clearly barriers to uptake of the vaccine across the globe. How is each country tackling this?
- How has each country dealt with claims that people have died around the world because of the vaccine. What have been the risk communication efforts in each country? There has been confusion raised by leaders from Europe simply eroding the trust of the population on COVID-19 vaccines.
- Recent confusion raised by leaders from Europe is simply eroding the trust of the population on COVID vaccines. Do they understand this?
- How would you tackle so many confusing messages that are being floated through WhatsApp and also by eminent personalities who advocate alternative medicine which is prevalent and encouraged by India?
- How do you make the vaccine popular in India?
- What vaccine education efforts are ongoing in India to mitigate vaccine hesitancy especially for rural areas and urban vulnerable groups like migrants and slum dwellers?
- What means of communications about possible side effects are being used in the UK? How often and how early are patients being engaged?
- Are there any reports of ‘blood clot’ problems through active or passive surveillance in India?
- Are all Covid vaccines safe for people on any form of steroid therapy?
- Are the incidents/deaths post-vaccination studied for possible implications?
- What is the chance of emergency usage indication of COVID-19 vaccine by WHO vulnerable to strong negative criticism in 2025? A predictive and scientific response (quantitative) by the experts’ is the expectation but not challenging the decision now (2020-21).
- At what stage of pre vaccination does a patient need to be given colchicine?
- Does aspirin /clopidogrel has any role in prevention of complications post vaccination (AstraZeneca)
- Is strict blood sugar control and strict blood pressure control and CRP prerequisites for AstraZeneca vaccine to prevent immune inflammation?
- Messenger RNA based vaccines require ultralow cooling freezers. Injections administration require ambient temperature (body temperature) and to the best of my knowledge mRNA start decomposing within minutes at room temperature. Are there any studies on the “Take” (Effective vaccine injected) during roll out in the community? Neutralizing antibodies produced?
- Vector based Oxford AstraZeneca use same vector ChAd vs Sputnik two different vectors Ad 05 and Ad26. Immunologically different vector in second dose should produce more effective in producing immunity against the target antigen. What are the observations/findings from studies?
- Which vaccine is most effective and has the least side effects?
- More information on AstraZeneca & Sputnik V Covid Vaccines?
- What are the positive and negative sides of AstraZeneca vaccine? Can we trust the efficacy of this vaccine?
- Can the AstraZeneca vaccine be given to patients with ongoing neurological conditions?
- Can AstraZeneca vaccine be given to patients with severe opioid withdrawal symptoms?
- Can the vaccines be given with other routine vaccines? If not, how far apart?
- Many vaccines have not completed phase 3 trial. Your comment about this
Appendix 1 Audience questions continued

- What are the plans of dealing with changing or mutating strains of the virus?
- Will new vaccine strains be developed in pace with the changing or new strains?
- Mutation is still a question. Will the vaccine still be productive if the virus mutates?
- Can a mother of >6months old baby get the vaccine if she is a frontline healthcare worker & when she can get the vaccine?
- In some news it has been reported that people vaccinated with 2 doses of sinopharm and the ones who did not develop antibodies against COVID-19 are receiving a third dose of this vaccine. So, the questions are: 1. Are you taking quantitative antibodies to the entire population that received the 2 doses of sinopharm? If so, after how long? 2. What is the level of antibodies needed to decide who will receive the third dose and who will not? What type of antibody test is the most appropriate? 3. Finally, after the third dose, how long should they wait to take the antibodies again?
- Why are vaccine AEFI not publicized as much as the vaccine itself?
- Are vaccinated people asked about what they observed after being vaccinated?
- Should vaccines be administered to people with uncontrolled hypertension or diabetes?
- Are there any cross country/ cross cultural differences in vaccine efficacy or side effects? Can vaccines developed/ manufactured in country be expected to have the same effect and adverse effects in any country of its use?
- Are there any specific contraindications of covid vaccine after the number of incidents reported after vaccinations?
- Some research showed that less amount of vaccine can develop more antibodies in the body. Are we going to test and implement it? If it’s true than it could be helpful.

Vaccine deployment

- The UK developed the Oxford AstraZeneca vaccine, India is manufacturing it and the UAE has been a major transport hub to store and ship the vaccines. Funders such as ADB have also been supporting countries purchase vaccines. How important has international collaboration been in the vaccine rollouts?
- Are you aware of problems with counterfeit/fake vaccines in your respective countries? If so, how have you addressed this?
- How is the rural population or the urban underprivileged being targeted in India? Is it through a voluntary or active support system?
- When is the COVID19 vaccine which is safe for children likely to be available in India? When available, can it be considered as a part of the Universal Immunization Program?
- Have you found the number of volunteers in the UK has remained the same since setting up the clinic, or has there been a sense of ‘volunteer fatigue’?
- Now that colleges and universities have opened in India, should we start vaccinating teachers?
- How many people are being vaccinated in a day in a clinical setting?
- Is India prepared to engage with other countries or be partners in developing or manufacturing vaccines in other countries?
- Should COVAX decline to distribute tobacco industry COVID vaccines? These vaccines are not even available yet, but are enabling the industry to gain enormous publicity and, in time, access to WHO and governments, with huge implications for WHO FCTC Article 5.3. It could lead to the unimaginable situation of GAVI, WHO and CEPI sitting in the same room and discussing health with the tobacco industry.
- What happens to your normal vaccine schedule for infants, antenatal mother, Children >10yrs age group?
- It is difficult to manage vaccination during conflict zones. Should the solution be to make a peaceful situation in the region first?
- Can you describe vaccine strategies for vulnerable populations in less developed countries?
- What is the role of primary care in the Indian national vaccine rollout?
- Covid numbers are rising, largely due to internal travel. Any updates on whether international agencies are thinking to make vaccination compulsory for travellers?
- Will a door to door vaccination drive be a possible option in the near future?
- Is India prepared to engage with other countries or be partners in developing or manufacturing vaccines in other countries?