

SCIENTIFIC LETTER - PUBLIC HEALTH

COVID VACCINATION AND AIRPORT SURVEILLANCE UNDER PUBLIC PRIVATE PARTNERSHIP (PPP) IN CHENGALPATTU DISTRICT, TAMILNADU, INDIA.

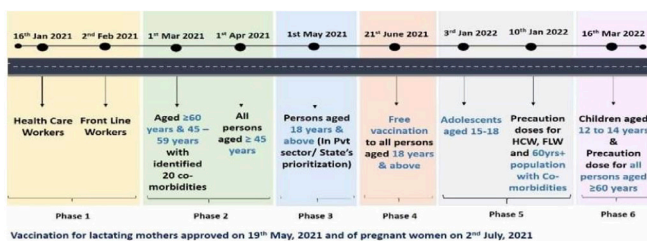
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INTRODUCTION

Covid vaccination in India began on January 16, 2021. The vaccination was launched in phased manner. The first phase of the roll out was in January 2021 involved health workers and front line workers. The next phase of the vaccine roll out on 1st March 2021 covered all residents over the age of 60 and residents between the ages 45 and 60 with co morbidities. From 1st April 2021, eligibility was extended to all residents over the age 45. From 21st June 2021, the vaccination was extended to all above 18 yrs. The next phase of the roll out on 3rd January 2022 for all the adolescents under the age group of 15 – 18 yrs and on 10th January 2022 precaution dose for the health workers, front line workers and 60 + population with co morbidities. The phase six roll out was on 16th March 2022 for the children ages 12 – 14 years and precaution dos for all persons ages more than 60 years..

There were challenges in the implementation of covid vaccination programme all over India. During the initial period of roll out (January 2021) vaccine hesitancy was there. Later during the post peak of 1st wave and 2nd wave of covid pandemic vaccine avoidance was the challenge faced. There was also inequity in vaccine supply also. The Departments adopted various innovations for the coverage of covid vaccination. One among those innovations was the standalone vaccination centre.



There was emergence of variants of corona virus all over the world too. Since the District had International Airport it was a great challenge for the District. The need for Airport surveillance was crucial for the District. Under Public Private Partnership Airport surveillance was initiated at Chennai International Airport.

CARE INDIA

CARE India is a Non Governmental organization which works for Health system strengthening, women health adolescent health and Child health. They have established covid care centre in various states, supported covid vaccination in various states and IEC activities on Covid in various staes of India.

1. STANDALONE VACCINATION CENTRE

Standalone vaccination centres are those centres which functions exclusively for the covid vaccination. In Chengalpattu District, the public Health Department along with CARE, India under Public Private Partnership established a standalone covid vaccination centre at Govt. upgraded Primary health centre, Nandhivaram on 24th September, 2021 and at National Institute of Siddha, Tambaram on 4th October 2021. The Vaccination centre was functioning from 6am to 9pm on all days. The vaccination centre was designed as per the guidelines of Govt. of India for covid vaccination centre.



WAITING AREA: Demarcated waiting area with seating location 1 foot apart with adequate arrangement of chairs, drinking water was made. The waiting area had 4 counters for registration of beneficiaries. Special counters were



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there for elderly, female and person with special needs. The beneficiaries who walk in for covid vaccination were screened using thermal scanners and let in the vaccination centre. The Date Entry Operators will enter the details in Cowin app and do photo verification using the valid documents produced by the beneficiary. After verification the beneficiary will be allowed to go for vaccination. Without entering in the cowin app no beneficiary was allowed for covid vaccination.

VACCINATION AREA: There were dedicated rooms for vaccination with one table, two chairs, sanitizer arrangement and all other logistics for vaccination. Totally 4 such vaccination rooms for covishield first dose, covishield second dose, Covaxin and pink booth for women folks.



OBSERVATION ROOM: After vaccination, the beneficiary has to wait for 30 minutes for observation. Dedicated observation room with emergency corner for management of AEFI was there. There was a medical officer and staff nurse posted in observation room for the observation of beneficiaries post covid vaccination. The observation hall also had Television, Selfie corner etc for the entertainment of the beneficiaries. QR code scanning facility was also available, where the beneficiaries can download the vaccination certificate.

Adequate IEC Materials like banner, poster, and leaflets about Covid 19 vaccination was available in the waiting area and observation area.



COMMUNITY ENGAGEMENT:

A wide publicity was made about the standalone vaccination centre. The local bodies, influencers and mobilizers were sensitized about the vaccination centre. Since, the vaccination centre was on GST, it also added publicity about this centre.

COLD CHAIN MAINTENANCE:

As there was no VVM on the vial of the vaccine, cold Chain maintenance was a prime importance. All Vaccination

teams was supplied with an extra vaccine carrier with conditional icepack for replenishment of icepacks in the vaccine carrier with vaccine vials. Every morning vaccines will be received from the cold chain point (Nandhivaram UGPHC) in a vaccine carrier with conditioned icepacks. At the session, vaccine carrier will all icepacks, used vials and unopened vials was sent back to the distributing cold chain point. Intact sealed vials returned on the previous session day, was used first the next day.

INFECTION PREVENTION AND CONTROL PRACTICES:

Any beneficiary on workers with ILI symptoms was not allowed in the vaccination centre. Hand Hygiene was followed by all workers with hand sanitizer. All beneficiaries and workers were wearing three layered surgical mask ensured. The environmental surfaces and the rooms were cleaned and disinfected three times a day. Hand sanitizer was made available for use by beneficiaries and their companion at the entrance of vaccination centre. All immunization waste was disposed as per protocols.

MANAGEMENT OF AEFI:

For management of Adverse Event Following Immunization (AEFI), a dedicated room was available with AEFI kit containing of Inj. adrenaline, Inj. Hydrocortisone, RL/NS-1, 5% Dextrose, IV Cannula / Scalp vein-2, IV drip set-2, Disposable syringes -5 Nos and adhesive taps. The room was also equipped with O2 concentrator, IV stand, Cot with mattress and AEFI Registers.

2. DRIVE THROUGH VACCINATION

The standalone vaccination centre had a counter for Drive through vaccination. Drive through vaccination, the beneficiaries who are not able to reach the regular vaccination counter like elderly people, physically challenged were vaccinated. The beneficiaries were brought to the drive through vaccination site in the car/auto by their family members. The beneficiary will be registered and verified by the data entry operator in cowin app. After verification the staff nurse will take the vaccine carrier with vaccines and other logistics to the drive through vaccination site and do vaccination in the car/auto itself. After vaccination the beneficiary will be waiting in the site for 30 minutes for observation.



3. HOUSE TO HOUSE VACCINATION USING MOBILE VACCINATION TEAM

The District initiated House to House vaccination using Mobile Vaccination team under Public Private Partnership. This was launched in a remote village Saravambakkam of Madhuranthagam Block on November 2nd 2021 by Honorable Health Minister of Tamilnadu. Under PPP 13 Vehicles was deployed by CARE, India for House to House vaccination. One mobile vehicle per Block/Municipality was allotted for House to House Vaccination. The Mobile Vaccination team consists of a Staff Nurse, Data Entry Operator and a Driver. The team visits the village with all the logistics needed for vaccination including Anaphylaxis kit. The team prepares an ATP in coordination with the Block Medical Officer (BMO) and the Child Development Project Officer (CDPO). The ATP is shared to the field functionaries and local bodies for coverage of all beneficiaries in the village. The team also coordinated with District Differently Abled Welfare Officer and got the list of beneficiaries who are bedridden and the physically challenged beneficiaries. The team during visit to that village vaccinated these beneficiaries with special needs in their house itself, which were a boon to them.

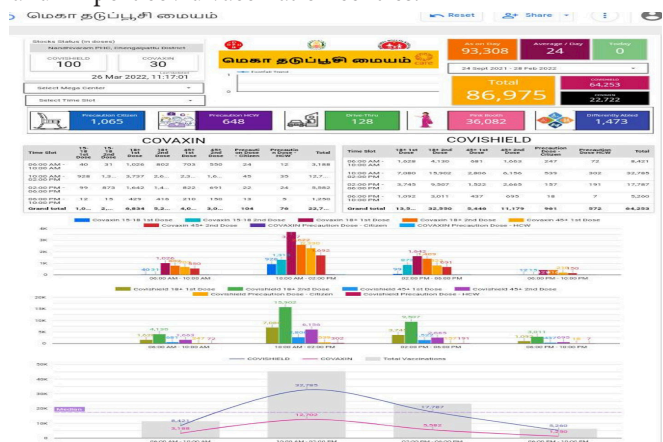


4. VACCINATION AT INTERNATIONAL AIRPORT



Covid vaccination site was established at Chennai International and Domestic Terminals. The site was equipped with a Data Entry Operator, Staff Nurse and a Medical Officer with adequate vaccines and logistics. QR code scanning facility was also made available in the Covid vaccination site; so that the beneficiaries can download their vaccination certificate

VACCINATION COVERAGE: The total vaccination coverage by the standalone vaccination centre is 249314. The vaccination coverage was collected every hourly by CARE India and DDHS Office using a link <https://tiny.one/tnmvcdashboard>. This link helped us to monitor the daily performance of vaccination at standalone, House to House and Airport covid vaccination centres.



5. AIRPORT SURVEILLANCE

Since there was emergence of new variants of corona virus from other countries in India, the Airport surveillance was strengthened. In Chennai International Airport along with Airport Authority of India Airport surveillance was initiated. The Airport surveillance team was conducting fever screening and Covid sample collection at the Airport. The surveillance was done round the clock (24/7) in three shifts. The surveillance team consists of Medical Officer, Health Inspector, Lab Technician and staff nurse. Due to the new Covid 19 variant, Omicron new testing guidelines was released on December 2021. According to this guidelines all passengers from high risk countries like South Africa, China, New Zealand, Hong Kong, Brazil, Bangladesh, Botswana, Mauritius, Zimbabwe, Singapore, Israel and European countries including UK were compulsorily tested for covid, irrespective of the vaccination status. The International passengers from above countries were not allowed to leave the Airport till they get their RTPCR test results. If such travelers test positive, their samples was sent for genomic testing to INSACOG laboratory network, and they are shifted to King Institute in 108 Ambulance for further management and treatment. Later the guidelines were modified and only

2 percentage of the International passengers were randomly tested for RTPCR. Health Inspectors for the Airport surveillance team was deployed by CARE, India under Public Private Partnership.

HUMAN RESOURCES INVOLVED:

Human Resources - Chengalpet Vaccination Point									
S.No	Location	Manager	Medical Officer	Vaccinator	Health Inspectors	Data Entry Operator	Security	House Keeping	Vechiles
1	Nandhivaram Vaccination Center	1	2	10	-	15	4	6	-
2	Thambaram Vaccination Center		2	6	-	8	4	6	-
3	Airport- Vaccination Center		Supported by DPH	2	-	2	0	0	-
4	Mobile Vaccination Team - Chengalpet		-	-	-	4	-	-	15
5	Airport Surveillance		-	4	8	-	-	-	-

Visits by



CONCLUSION

Public Private Partnership (PPP) is commonly used for the upgrading and maintenance of facilities in the public health sector. This model was used by Chengalpattu District for the vaccination coverage during the vaccine avoidance and vaccine hesitancy period and also for Airport surveillance during the emergence of variants of corona virus. This helped the District to cover many beneficiaries as the ambience of the standalone vaccination centre was excellent with selfie corners, neat and tidy environment. This model can be replicated for other National Health Programmes too, especially for Routine Immunization which eventually help in the reduction of drop outs and left outs of Immunization.