Original Article

Are we expecting too much for too long from the vaccinators? A qualitative study on perceived challenges of COVID-19 vaccinators of district Shahdol, India

Akash Ranjan Singh[1], Vikrant Kabirpanthi[1], Anshuman Sonare[2], Pragati V. Chavan[1], Mohd. Ashraf[3], Hemant D. Shewade[4]

[1]Department of Community Medicine, Government Medical College Shahdol, Madhya Pradesh, [2]District Immunization Officer, Shahdol, Madhya Pradesh, [3]District Data Manager, District Health System, Shahdol, Madhya Pradesh, [4]Division of Health System Research, ICMR-National Institute of Epidemiology (ICMR-NIE), Chennai, Tamil Nadu, India

Abstract

Background: There is a paucity of knowledge regarding challenges faced by the coronavirus disease 2019 (COVID-19) vaccinators in resource constraint settings like district Shahdol, Central India. Hence, the present study was planned to explore the perceived challenges of vaccinators regarding COVID-19 vaccination. **Methods:** In October 2021, district health authorities conducted a one-day workshop with the auxiliary nurse midwives, staff nurses, and lady health visitors who work as vaccinators. It had three distinct but mutually connected phases. In the first phase, a free listing exercise was performed to list out their perceived challenges that are prominent and representative of their cultural domain. In the second phase, the pile-sorting exercise with the challenges mentioned in the above step was performed to produce similar data in the form of a matrix, based on a perceived similarity between them by multi-dimensional scaling analysis. In the final phase, the transcripts generated during the discussion on the free listing and pile sorting exercises was used for the thematic analysis to find plausible explanations for the findings. **Result:** A total of 15 vaccinators took part in the workshop. In the free listing exercise, a total of 14 items were identified as perceived challenges for COVID-19 vaccinators. The three items with the highest Smith's S value were overtime duty, no holidays, and lack of monetary incentive. The analysis of pile-sorting suggested that participants clustered their 14 perceived challenges into five groups; 1) beneficiaries related, 2) vaccination schedule related, 3) lack of facilities at vaccination site, 4) lack of monetary incentive, and 5) issues related to digital data handling. Thematic analysis suggested that their main challenges were overtime duty, no monetary incentive, and lack of toilet, food, and transport facility at the session site. **Conclusion:** Vaccinators perceive overtime duty and lack of holidays as their top two challenges and expect monetary incentives for this. The study recommends better basic amenities like toilet facility, sustained and effective community engagement, a monetary incentive, and a better ecosystem for digital data handling for the vaccinators.

Keywords: Challenges of vaccinators, free listing, pile sorting, vaccine hesitancy

Introduction

Coronavirus disease 2019 (COVID-19) caused by Severe Acute Respiratory Syndrome Coronavirus 2 was first reported in Wuhan, China, in late 2019.[1] Since then, the quest for effective vaccines has preoccupied the scientific community worldwide.[2] COVID-19 pandemic has led to global shutdowns

Address for correspondence: Dr. Akash Ranjan Singh, Assistant Professor, Department of Community Medicine, Government Medical College Shahdol, Madhya Pradesh, India.
E-mail: akashranjan02@gmail.com

Received: 20-01-2022 **Revised:** 30-03-2022
Accepted: 06-04-2022 **Published:** 31-10-2022

Access this article online

Quick Response Code:

Website: www.jfmpc.com

DOI: 10.4103/jfmpc.jfmpc_148_22

How to cite this article: Singh AR, Kabirpanthi V, Sonare A, Chavan PV, Ashraf M, Shewade HD. Are we expecting too much for too long from the vaccinators? A qualitative study on perceived challenges of COVID-19 vaccinators of district Shahdol, India. J Family Med Prim Care 2022;11:5940-55.

and/or restrictions on economic and social activities. It has caused an unprecedented strain on healthcare services.[3,4]

After the organized efforts of more than a year, as of January 2021, there were 78 vaccine candidates with 201 trials ongoing, of which 12 vaccines were approved in different parts of the world.[5] These vaccines have provided a beacon of hope in the fight against COVID-19. In India, the first vaccine approved in January 2021 was Oxford/AstraZeneca COVID-19 AZD1222. The indigenous CoVaccine HT™ was approved for emergency use in March 2021.[6] The National COVID-19 Vaccination Programme (NCVP) is unique in the sense that for the first time in India, a vaccination programme was being introduced for adults by the public health system.

Madhya Pradesh state (the second-largest state, central India, 80 million population) started NVCP on 16 January 2021, and so did district Shahdol. The district is located in the eastern part of the state and has an estimated population of 1.2 million.[7] At the outset of the NVCP, the beneficiaries were healthcare workers only. Since 8 February 2021, front-line workers (FLW) like Anganwadi workers, police force, and workers of the revenue department were included. In early March, elderly (>60 years) and 45–60 years with selected co-morbidities were included. From 11 April 2021, all the people aged more than 45 years, and from 5 May 2021, all the people aged more than 18 years were included as eligible for COVID-19 vaccination. As per the guidelines, the district administration estimated the number of beneficiaries based on records from the state election commission.[6] In October 2021, the total beneficiaries for vaccination in the district were approximately 800 thousand.[8]

Despite the scarce human resources, with the organized efforts of district administration, inter-sectoral coordination, and implementation of NCVP in campaign mode, the district has administered 10,42,254 doses as of 25 October 2021. This translates to 91.3% of estimated first doses and 61.2% of estimated second doses, which is one of the best in the state.[9] [Figure 1]

Besides vaccine availability (which improved over time), the cornerstone of NCVP was the community mobilisers and vaccinators. Of 296 auxiliary nurse midwives (ANMs) and staff nurses under the public health system in the district, 240 worked as vaccinators under NCVP. Since June 2021, they have been holding COVID-19 vaccination sessions almost daily, including Sundays and Government holidays. There are reasons to believe that this prolonged and persistent duty schedule might have taken a toll, both physically and mentally.

Globally, studies suggest there is COVID-19 vaccine hesitancy among the general population, logistic issues, and a lack of availability of vaccines.[10-12] There is a paucity of knowledge regarding challenges faced by COVID-19 vaccinators, especially in resource constraint settings.[12] Hence, the present study was conducted to explore the perceived challenges of vaccinators regarding COVID-19 vaccination in district Shahdol, Madhya Pradesh, India. The understanding of the perceived challenges of vaccinators may lead to operationally feasible solutions. This is pertinent considering that, in the near future, it is highly likely that this campaign may be extended to cover children.[6]

Materials and Methods

Setting

The sex ratio in Shahdol is 974 females for 1000 males, with a literacy rate of 76% among males and 57% among females. Scheduled Tribe and Scheduled Caste, marginalised and disadvantaged groups as per the Indian constitution, constitute 44.7% and 8.4% of the population, respectively. The district has four administrative blocks, i.e., Beohari, Jaitpur, Sohagpur, and Jaisinghnagar.[13] The district health system of Shahdol comprises one district hospital at Shahdol, one civil hospital at Beohari, seven community health centers, 29 rural primary health centers, one urban primary health center, and 256 functional sub-health centres.

Routine immunisation (RI) service is one of the important activities performed by the vaccinators. For RI service, a micro plan is prepared by the health system on the basis of house to house survey and head counting on a half-yearly basis. This primary health center (PHC) micro plan incorporates the sub health center (SC) information which is essential for planning and logistics management. The RI session is scheduled and conducted for every village, usually once a month. At the village level, these sessions are held at a station, which may be the building of SC, anganwadi center (AWC), or Gram-Panchayat. The responsibility for mobilisation of beneficiaries to these centres lies with accredited social health activist (ASHA), anganwadi worker (AWW), or link workers.[14]

In addition, India has also launched a few immunisation services in campaign mode with specific objectives, like mission *Idradhanush was launched* to cover left out children in selected 190 districts. The Measles Rubella (MR) campaign was a mass vaccination campaign to introduce the MR vaccine to the children of age group from nine-months to 15 years. All children of this age group received an additional dose of vaccine, regardless of their previous vaccination status or history of illness. During these campaigns, during the first few days or weeks, vaccines were instituted to the beneficiaries at regular RI sites and also at outreach sites like educational institutes, villages, or urban mohallas. To cover the left out children, e.g., children of hard-to-reach areas, underserved areas, or areas with migratory populations, etc., mobile and outreach teams were constituted to conduct vaccination sessions.[15]

During the initial phase of the NCVP campaign for the vaccination of healthcare workers, fixed session sites (at or above the level of PHC) were identified. Afterward, for the vaccination of FLWs few other session sites like schools, colleges, community halls, municipal offices, panchayat buildings, anganwadi center (AW) buildings, railway hospitals, etc., were also identified as outreach session sites, provided they fulfilled all the pre-requisite

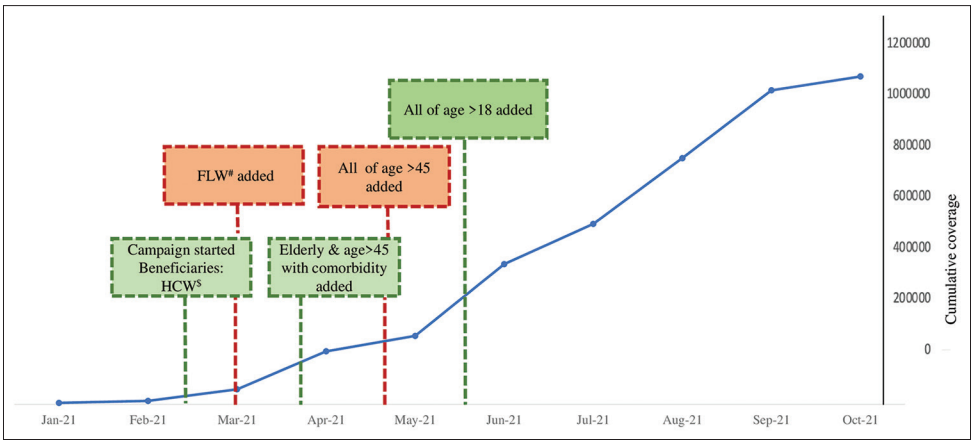

Figure 1: COVID-19 vaccination coverage with changing guidelines regarding beneficiaries in district Shahdol from January to October 2021. Footnote: $ HCW: Healthcare workers, # FLW: Front line workers

conditions for arranging a session. An election polling booth list was utilised for the identification of outreach session sites. Furthermore, for the vaccination of people from hard-to-reach areas and areas with migratory populations, a special mobile team was formed. This team visited door-to-door and vaccinated the people if identified as unvaccinated. This is for the first time in India that an injectable vaccine was administered door-to-door. All COVID-19 vaccination sessions were conducted from nine am to five pm, four days a week, leaving Tuesday and Friday for RI. All efforts were undertaken to ensure no overcrowding of beneficiaries/attendants at the vaccination session site.[16]

To get the vaccine, beneficiaries are supposed to register themselves on the Cowin portal before or during the session.[9] Once the beneficiary reaches the session site, particular information (name, age, mobile number, etc.) related to him is validated, and documents like Aadhaar card, Permanent Account Number (PAN) card, driving license, etc., are uploaded to the portal before vaccination. The Cowin portal is also meant to track the beneficiary for the administration of the subsequent dose of the COVID-19 vaccine. After the administration of the vaccine, beneficiaries were asked to stay for at least 30 minutes to observe any adverse event following the immunisation, before they left the session site.[16]

Study type

This was a descriptive qualitative study. We used three distinct but interrelated systematic techniques to achieve the objective of the study. In the first phase, we used a free listing exercise to enumerate the challenges. In the second phase, pile-sorting was done. At last, thematic analysis was performed of the verbatim transcript obtained from the discussion during the free listing and pile sorting. The findings of previous phases were fed into designing and interpreting the latter. Field notes and memos were also taken to put the results in context. Finally, the findings obtained were triangulated to increase the heterogenicity and validity of the results. The investigators chose the above techniques to achieve the study objective because they were easy to carry out, less time-consuming, and easy to analyse.[17]

Study participants and period

All the ANMs, staff nurses, and lady health visitors (senior ANMs at the level of primary health centre who supervise the ANMs) working as vaccinators under NCVP for at least three months were the sampling frame. The selection of participants was based on the criteria that they should be vocal, knowledgeable, and ready to participate in the study. After brainstorming among the investigators, participants were decided by consensus in order to get maximum variability in the responses. It was a daylong exercise: participants were supposed to come in the morning and stay till evening. Hence, participants from distant blocks were not considered for the study. The investigators presumed that participants from other blocks did not have different challenges.

Overall, 20 participants were invited to participate in the study. Out of them, 15 managed to come to a pre-decided place and time. For all three phases of the study, the participants remained the same, and all phases were conducted on the same day in October 2021.

Data collection and analysis

After explaining the purpose of the study, the participants were allowed to ask questions to ensure comprehension. It was an important step to begin with because the study was carried out by the district health system itself (some investigators were part of it). The advantage is that the investigators were aware of the settings, and the disadvantage is that the participants may feel a bit hesitant and provide administratively desirable responses.

Phase I: For the free listing exercise, participants were asked to list out their perceived challenges that are prominent and representative of the cultural domain. They were also encouraged to stick to the semantic domain related to the objective of the study. As all of them understood the local language (*Hindi)*, the responses were recorded in *Hindi* itself. Participants had completed the list within 15 minutes. The responses in the list were read, and participants were asked to explain the items in their list, if needed, to ensure the participants' validation. They

were allowed to discuss among themselves and add the items to their list if they wanted to. Once completed, a comprehensive list of items was generated.[17] These items were reframed in a word or phrase and labelled as items in *Hindi*. Then the list of every participant was searched for these items. Every attempt was made to avoid clouding of equivalent items by combining similar words or phrases. Finally, for every participant, the list of items generated was entered in the same order in the desired format in the Visual anthropac software package to calculate the Smith's Salient Score (Smith's S value). This score is calculated considering the frequency and rank of items in the list of every participant.[17] This finding was shared with the participant before moving to pile-sorting [Table 1 in Annexure].

Phase II: The purpose of the pile-sorting exercise was to produce similarity data in the form of a matrix, based on the perceived similarity of items.[18] Priority items were identified based on high Smith's S value and high importance as per consensus among the investigators. Each identified item was then explained to the participants. To begin this exercise, each identified item was written on a separate card, and a unique number was assigned on the backside of the card. One by one, participants were provided the stack of these cards and asked to make as many groups of cards as they wanted, depending on the perceived similarity (pile). When each participant was ready with the piles, we noted the number of cards in every pile. The participants were also asked to explain the reason in their own words for making piles. The reasons were noted down. If the participant chose not to write the reason for grouping, they were allowed to do so.[17,19]

The aggregate priority matrix for all the participants was analysed by multi-dimensional scaling (MDS) analysis using a visual anthropac software package.[20] MDS is a cognitive map that represents the way of thinking of participants while they pile-sorted the items. This analysis depicts the relationship between the items in a pile. The present study only looks at the clusters in the MDS to explain the participants' perceived barriers. The clustering of items explains participants' perceived resemblances among the items. MDS map was drawn while analysing the data and shared among the investigators.[17] The findings of pile sorting were also shared with participants to ensure participant validation. Towards the end of the exercise, participants were thanked for their contribution, and refreshments were offered.

Phase III: The transcript generated during the discussion on the free listing and pile-sorting exercises and field notes were used for manual thematic analysis.[21] Codes and themes were reviewed by a second investigator to reduce bias and interpretive credibility. The decision on coding rules and theme generation was done by using standard procedures and with consensus among investigators. This analysis was done within 24 hours. To bring transparency and avoid selective interpretation in the data analysis process, we applied bracketing (epoch) before initiating the coding process.[22] Any difference between the investigators was resolved by discussion. Codes were generated on the basis of the inductive method, on the basis of pile sorting by the participants and their plausible explanation of the same. Similar codes were combined into themes. To ensure that the results were a true reflection of data, the codes were reverted to the original data.[23] The main purpose of this thematic analysis was to find a plausible explanation of the findings of free listing and pile-sorting; hence, triangulation of free listing, pile sorting, and thematic analysis was used to identify perceived challenges of vaccinators regarding NCVP.

Ethics

The study was undertaken by the district health system as part of routine supportive supervision of NCVP. Institutional Ethical and Review Committee, Government Medical College Shahdol Madhya Pradesh, India, approved the study.

Results

The median age of the 15 participants was 40 years and the median years of experience was 12 years. During free listing, a total of 14 unique items were identified as perceived challenges of COVID-19 vaccinators. On the basis of their decreasing Smith's S value, the items were overtime duty, no holidays, lack of monetary incentive, lack of handwashing facility [at the vaccination site], perceived side effects of beneficiaries [like fever, weakness], lack of transport facility [for vaccinators], people [beneficiaries] not wanting to wait, overwork, door-to-door vaccination, lack of toilet, food and drinking water facility [at session site], difficulty in digital data handling, myths of beneficiaries regarding COVID-19 vaccine, e.g., vaccine causes abortion, infertility and chronic illness perceived by beneficiaries, overcrowding during the sessions, and mental stress. (see Table 1 for Smith's S value)

Analysis of pile-sorting suggested that participants clustered their 14 perceived challenges into five groups, which they found mutually related to each other. [Figure 2] These identified five groups were; 1) beneficiaries related issues, 2) vaccination schedule related issues, 3) lack of facilities at vaccination site, 4) lack of monetary incentives, and 5) issues related to digital data handling (see Table 2 for pile sorting by each participant and reasoning behind it).

1. Beneficiaries related issues: Under this category, participants enumerated perceived challenges of beneficiaries which possibly contributed to hesitancy as perceived by the participants
   a. People [beneficiaries] do not want to wait: A vial of COVID-19 vaccine contains ten doses. So, during a session, it was routine practice to ask the beneficiaries to wait till the number becomes ten so that there is no wastage of the vaccine. One of the vaccinators mentioned,
   Beneficiaries do not want to wait at the vaccination session site, as they want the vaccine to be given to them as soon as they reach, and also, they do not want to wait half an hour after the vaccination. (48-year ANM/Experience 29 years)
   b. Myths of beneficiaries regarding the COVID-19 vaccine: As perceived by the participants, beneficiaries had many myths related to the COVID-19 vaccine. It possibly made

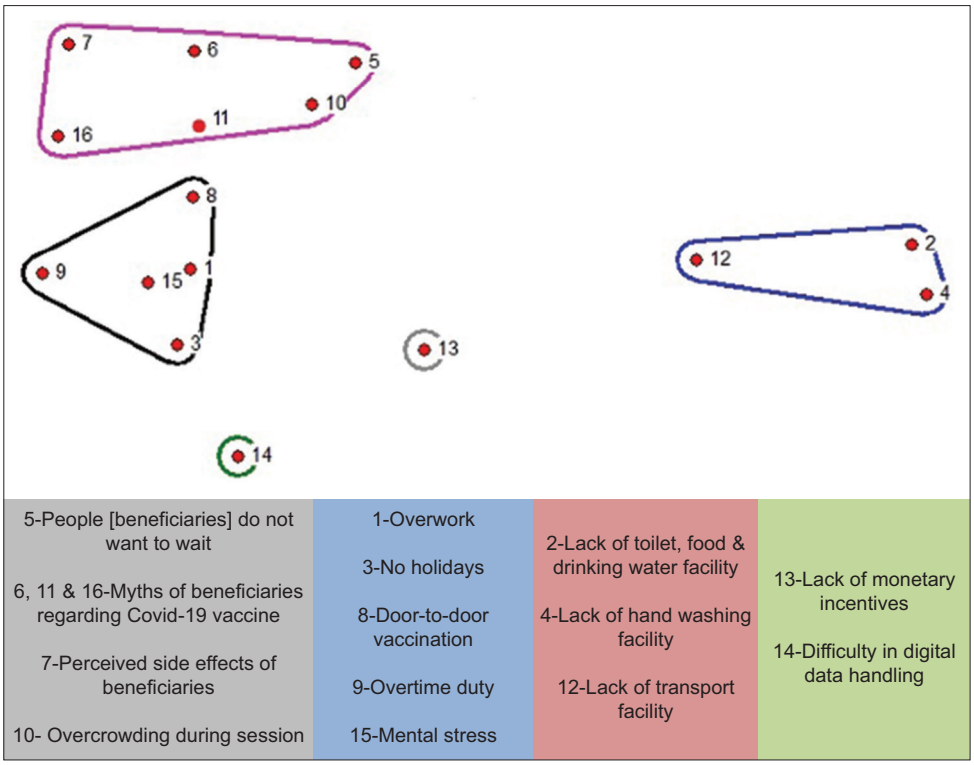

Figure 2: Cultural map showing the relationship between perceived challenges of vaccinators regarding Covid-19 vaccination on Shahdol 2021 through multi-dimensional scaling method

Table 1: Priority challenges of vaccinators and corresponding Smith Salient score, as finding of free listing exercise during workshop conducted by district health system Shahdol, India on 12 October 2021

Item#	Item	Smith salience score
#9	Overtime duty	0.617
#3	No holidays	0.456
#13	Lack of monetary incentive	0.24
#4	Lack of handwashing facility [at the vaccination site]	0.157
#7	Perceived side effects of beneficiaries [like fever, weakness]	0.156
#12	Lack of transport facility [for vaccinators]	0.144
#5	People [beneficiaries] do not want to wait	0.138
#1	Overwork	0.13
#8	Door-to-door vaccination	0.116
#2	Lack of toilet, food and drinking water facility [at session site]	0.11
#14	Difficulty in digital data handling	0.067
#6, #16, #11	Myths of beneficiaries regarding COVID-19 vaccine [e.g., Vaccine causes abortion, infertility and chronic illness perceived by beneficiaries]	0.044
#10	Overcrowding during session	0.038
#15	Mental stress	0.036

Footnote: #: Item number as mentioned on the rear side of the card used while pile-sorting exercise

them reluctant or circumspect to get vaccinated. The same is mentioned below

People from villages used to say that after vaccination, they would not be able to produce children. (41-year ANM/Experience 13 years)

c. Perceived side effects of the vaccine in beneficiaries: Many of the beneficiaries remained reluctant to get vaccinated because of fear of minor side effects.

Many people from villages believe that after vaccination, they would succumb to fever. (41-year ANM/Experience 13 years)

d. Overcrowding during sessions: During the mass campaign for the COVID-19 vaccination, the sessions were also held in small places like *Anganwadi* or *gram panchayat* building, where adequate space was lacking to accommodate even a small crowd of beneficiaries waiting for vaccination. One of the vaccinators quoted

A large gathering a crowd at the vaccination session site causes hindrance [in vaccination] *(41-year ANM/Experience 13 years)*

2. Vaccination schedule related issues: Vaccinators reported many issues pertaining to the microplanning and activities related to the COVID-19 vaccination campaign. Even though all the vaccinators have been performing routine immunisation activities for a long time, they still face these issues because of long duty hours, no holidays, and physically challenging activities like door-to-door vaccination.

a. Overwork: The vaccinators were willing to perform duties as COVID-19 vaccinators, but almost all looked annoyed with the long duty hours, including travel time (to reach and return from vaccination sites). As mentioned by a

Table 2: Pile-sorting of perceived challenges of vaccinators as per perceived similarly and reasons for grouping, during the workshop conducted by district health system Shahdol, India, on 12 October 2021

Respondent	Piles of items as formed by the respondents		Reasons for grouping
	Pile	Items	
#1	Pile 1	2,4	As per convenience
	Pile 2	5,10	
	Pile 3	1,3,8,9	Work overload during Covid-19 vaccination affects other duties
	Pile 4	12,13,14,15	
#2	Pile 1	9,14	Inconvenience
	Pile 2	4,8	Vaccine-related inconvenience
	Pile 3	2,12	Lack of facilities
	Pile 4	1,3,13,15	Problems of healthcare workers
	Pile 5	6,7,16	Vaccine-related myths & side effects
#3	Pile 1	2,4,12	Inconvenience of vaccinators
	Pile 2	8,9,16, 1,3,14,15	Unable to handle [Covid-19 vaccination related] work, like extra hours, data entry, etc.
	Pile 3	5,6,7,10,13	Beneficiaries-related challenges, e.g., side effects, inability to wait long, etc.
#4	Pile 1	1,2,4,8,12	Self-inconvenience
	Pile 2	5,10,15	Inconvenience to beneficiaries
	Pile 3	6,7,9,16	Vaccination related myths and side effects
	Pile 4	3,14	Work-related inconvenience
	Pile 5	13	Inconvenience [separately kept]
#5	Pile 1	1,6,7,8,10,16	Beneficiaries related issues [regarding Vaccine hesitancy] e.g., myths, side effects after the 1st dose
	Pile 2	5,9,15	Inconvenience of vaccinators
	Pile 3	2,4,12	Lack of vaccine site facilities
	Pile 4	3,13,14	Perceived discomfort
#6	Pile 1	5,6,8,10,16	Beneficiaries related issues, e.g.; myths, impatient to wait
	Pile 2	1,3,9,13,15	Mental stress causing factors
	Pile 3	2,4,12	Inconvenience of vaccinators
	Pile 4	14	Due to vaccination related [over] duty, entry to other digital portals like ANMOL affected
#7	Pile 1	1,9,10,15	Mental stress
	Pile 2	5,6,7,8,16	Beneficiaries related issues
	Pile 3	2,4,12	Challenge as a female vaccinator because of lack of basic amenities like toilet and handwashing facilities *एक महिला होने के नाते मुझे ये परेशानी होती है*
	Pile 4	3,13	Monetary incentive
	Pile 5	14	Data entry related
#8	Pile 1	1,8,9,15	Mental stress
	Pile 2	6,7,16	Myths, side effects related to vaccine
	Pile 3	2,4,12	Issues related to female vaccinator
	Pile 4	5,10	Problems caused by beneficiaries
	Pile 5	3,13,14	Lack of incentives
#9	Pile 1	1,3,8,9,12,15	Mental stress and Personal inconvenience
	Pile 2	5,6,7,10,16	Beneficiaries related issues
	Pile 3	14	Data entry
	Pile 4	13	Lack of incentives
	Pile 5	2,4	Lack of facilities at vaccination site
#10	Pile 1	1,3,8,9,15,16	Extra hour of work, mental stress
	Pile 2	6,7	Vaccine side effect
	Pile 3	2,4,12	Lack of facilities at session site
	Pile 4	14	Data entry
	Pile 5	13	
#11	Pile 1	1,3,8,9,14,15,16	Personal priority
	Pile 2	2,4,12	Challenge as a female vaccinator
	Pile 3	6,7,13	Vaccine side effects and myths
	Pile 4	5,10	Beneficiaries related issue

Contd...

Table 2: Contd...

Respondent	Piles of items as formed by the respondents		Reasons for grouping
	Pile	Items	
#12	Pile 1	1,3,8,9,10,13,13,15	Challenge as a female vaccinator
	Pile 2	5,6,7,16	Beneficiaries related issue
	Pile 3	2,4,12	Lack of facilities at vaccine site
	Pile 4	14	Data entry
#13	Pile 1	2,4,12	Lack of facilities at vaccine site
	Pile 2	1,5,8,9,10,15	Mental stress
	Pile 3	6,7,16	Vaccine side effects and myths
	Pile 4	13	Lack of incentives
	Pile 5	14	Data entry
#14	Pile 1	1,3,9,12,15	Mental stress
	Pile 2	5,6,7,8,10,6	Mobile vaccine team related issues
	Pile 3	2,4	Challenge as a female vaccinator
	Pile 4	14	Data entry
	Pile 5	13	Lack of incentives
#15	Pile 1	13	Lack of incentives
	Pile 2	3	Lack of holidays
	Pile 3	14	Data entry
	Pile 4	2,4	Lack of facilities at session site
	Pile 5	5,6,7,8,10,16	Beneficiaries related issue
	Pile 6	1,9,12,15	Mental stress

vaccinator

Vaccinating 350 or more people in a single day is a huge task. It causes backache and pain in hands, and we also did not find any time for a meal [during duty hours]. (40-year ANM/Experience 12 years)

This also affected their routine work

NCVP is so extensive that we could not carry out our routine work related to other national health programmes, [like] antenatal care (ANC) care and home visit to sick children. We are the ones who are being held responsible for the same. (43-year ANM/Experience 11 years)

b. No holidays: Since June 2021, the COVID-19 vaccination campaign has been running in campaign mode, and most of the vaccinators are working seven days a week; Tuesdays and Fridays, for routine immunisation and the rest of the five days for COVID-19 vaccination. They held sessions even on government holidays, so it was not very surprising to hear that it has affected their motivation, as cited by this quote

Working daily without getting even a single holiday takes a toll on the body physically and mentally. We could not get adequate rest and it eventually caused trouble in vaccination. Hence there must be one holiday in a week. (48-year ANM/Experience 29 years)

c. Door-to-door vaccination: After the initial drive for vaccination, the district administration decided COVID-19 vaccination needs to be carried out by visiting door-to-door in hard-to-reach areas. This caused inconvenience, as mentioned in a quote of a vaccinator posted in an urban area

We were forced to do door-to-door vaccination, but it compromised the effectiveness of vaccine because it is very difficult to maintain the temperature of the vaccine. (29-year ANM/Experience 13 years)

d. Overtime duty: Most vaccinators mentioned they have to present at the session site for at least eight hours. During our free listing exercise, most of the participants mentioned this as one of the top rank challenges perceived by them. Hence, the Smith's S score of this item was the highest.

Please suggest some way out for [long duty hours] time, because our duty schedule is from 9 am to 5 pm. Many times, we have to stay there [session site] till 7.00 pm. (41-year ANM/Experience 13 years)

e. Mental stress: During the free listing, only a couple of the vaccinators mentioned mental stress due to their duty as vaccinators; hence, the Smith's S value of this item was the least among the lot. However, when we discussed the findings of free listing and pile sorting subsequently, most of them came out with the observation that they had mental stress related to COVID-19 vaccination duties. As nicely mentioned in a memo of the investigator, who conducted these exercises,

This *mental stress might be because of no arrangement of toilet facility, meals and drinking water at the session site. It might also be due to door-to-door vaccination, mob handling during the sessions, and long duty hours.*

3. Lack of facilities at vaccination site: During the free listing, a few vaccinators wrote about the lack of facility, that too, only about lack of handwashing facility, but after completion of the first round of free listing exercise, when we asked the participants to add the items if they want, then many of them mentioned lack of toilet, meal, and drinking water as their challenge. It was obvious that they were hesitant to start with, but once they got into the pile sorting exercise, they were very vocal about the reasons for piling this group. [Table 2]

a. Lack of toilet, food, and drinking water facility: During the pile sorting exercise, most of the participants identified

these challenges as very important and mentioned the reason that

"*Ek mahila vaccinator hone ke naate mujhe ye pareshaniyan hoti hai" [Being a female vaccinator, I feel these problems]. (37-year ANM/Experience 13 years)*

b. Lack of handwashing facility: While the free listing exercise, this item ranked fourth, but investigators were not sure whether participants were talking about the handwashing facility for beneficiaries or for themselves. On clarification during the pile sorting exercise, it was clarified that they were more concerned about themselves. As mentioned by a senior lady health visitor of the district, *Whenever I used to visit the session site for supportive supervision, there was hardly any arrangement for hand washing. (50-year LHV/Experience 15 years)*

c. Lack of transport facility: The participants who were asked to conduct immunisation sessions at remote villages or villages located at far distance from their routine workstation, found it a challenge. Also, delays in ending sessions, data entry, and other work caused discomfort.

4. Lack of monetary incentive: ANMs involved in COVID-19 vaccination perceived this as additional work, which is physically and mentally very demanding; hence, they expect some monetary incentive for this.

NHM [National Health Mission, Madhya Pradesh] *office has instructed the local authorities for the remuneration worth Rs 100/vaccinator during a session, but we could not get that. (43-year LHV/Experience 11 years)*

In spite of the fact that we have been conducting [COVID-19] vaccination sessions almost daily since 16 January, we still did not get any monetary incentive for this. (43-year LHV/Experience 11 years)

5. Difficulty in digital data handling: Few of the vaccinators were also involved in digital data handling related to COVID-19 vaccination. During free listing, Smith's S value was 0.067, but during the pile sorting exercise, many of them labelled it as a challenging task and kept it as a separate pile sort. As cited,

I do not feel comfortable working as [data] verifier in the Cowin portal. (37-year LHV/Experience 13 years)

Discussion

Key findings

Ten months down the line, COVID-19 vaccination has now started to take a toll on the vaccinators of district Shahdol, which already has thin human resources in the public health system. Vaccinators perceive overtime duty and lack of holidays as their top two challenges and expect monetary incentives for this, which came out as a third-ranked challenge on the basis of the free listing exercise. Interestingly, a heavy workload was not among their top challenges. During the pile sorting exercise, participants were very vocal about their mental stress because of their COVID-19 vaccination-related work schedule. This mental stress might be because of the non-arrangement of toilet facility, meals and drinking water at the session site. It might also be due to the door-to-door vaccination, crowd handling during sessions, and long duty hours.

Strengths and limitations

There are limited qualitative studies on this topic. Robust methodology involving three tools of qualitative study methods and then triangulation of those to generate the final findings is one of the strengths of the study. This study explored a research question that potentially has immense importance in a resource constraint setting. While exploring the challenges of vaccinators, we did not pursue the concerns and challenges of vaccine mobilisers and district health authorities. This is a major limitation.

Relevance of key findings

The vaccinators perceive 'overtime duty' and 'no holidays' as their top challenges. Interestingly, overwork or heavy workload was not among their top challenges'; hence, it's imperative to draw the following interpretation here i) vaccinators are more concerned about the duty hours rather than the extent of work involved ii) only a few vaccination sessions cater to a high number of beneficiaries. In addition, the problem of overcrowding was not consistent across the session sites and over time. These are the same vaccinators who are involved in the immunisation programme for under-five children, both in routine and campaign mode.[11] But NCVP is running almost uninterrupted from January 2021 and still may remain for a while. The district health system needs to break new grounds in order to continue this campaign, which is likely to cater to some other beneficiaries like children or maybe a booster to healthcare workers in the near future.[6,24]

The present study reports that 'lack of monetary incentive' was third in the perceived challenges of the vaccinators. There is evidence across the globe, especially in north world countries, that monetary incentive to the public has improved the vaccination coverage.[25-27] However, in countries like India, considering monetary incentives to vaccinators should not be a breaking glass ceiling strategy iterative to achieve the present and potential future goals of mass COVID-19 vaccination.[28]

Interestingly, 'the lack of basic facilities' for the vaccinators at vaccination sites like toilet facility, handwashing facility, food, drinking water, and transport facility got very low ranking during the free listing exercise, but almost all the vaccinators seemed very concerned about these during pile sorting. Providing these facilities during mass vaccination campaigns is always a challenging task in remote villages and hamlets. But, choosing a session site at a public place that is easily accessible for the beneficiaries, yet having facilities for basic amenities is always a trade-off that needs to be considered while making micro-planning for the vaccination. The district health authorities may provide food, drinking water, and handwashing facilities at vaccination sites by engaging local Government bodies.

Like a few other studies, the present study also reports COVID-19 'vaccine hesitancy' among the beneficiaries as perceived by the vaccinators, like the vaccine will make them infertile or will cause abortion if administered to pregnant women.[10] Vaccinators

also reported perceived myths of the beneficiaries like the COVID-19 vaccine might cause prolonged illness or it may lead to death.[10] Studies from developing countries, including India, have reported hesitancy against routine immunization and measles-rubella vaccination campaigns for the child beneficiaries in the past also. Past experience has shown that these hesitancies can be addressed by effective community engagement and promoting positive attributes of vaccination.[29] COVID-19 vaccine-related concerns might also be addressed by locally relevant mass media campaigns and effective community engagement.

Vaccinators perceived that beneficiaries did not 'want to wait to get vaccination'. This was possibly a result of a strategy to ensure zero wastage (making beneficiaries wait till the desired number of people arrive at the vaccination site). With an erratic and inconsistent supply of COVID-19 vaccine during the initial months of NCVP, it was imperative for the district administration to make a trade-off between vaccination coverage and vaccine wastage. However, in the last couple of months, the supply chain of COVID-19 vaccines has dramatically improved. This has enabled the system to ensure that not a single beneficiary is left unvaccinated or has to wait for long at the vaccination site. Strategies to ensure zero wastage is unlike in child vaccination (routine as well as campaign mode), where the priority is to vaccinate each and every child; vaccinate even if one vial has to be opened for a single child. At the same time, the wastage factor is monitored to ensure that it is below an acceptable level.[14] This principle, for some reason, was not followed for COVID-19, and this needs to be explored in further studies (beyond the scope of this study).

Surprisingly, the vaccinators were not at all concerned about the quickly changing vaccine-related information, frequently changing vaccine schedules, centralised record system in the Cowin portal, religious acceptability of vaccines, and choice of vaccine for the beneficiaries as reported in other studies.[10] This might be because these vaccinators are only involved in the vaccination process when the beneficiaries reach the session site; rather, this might be the challenge for vaccine mobilisers and district health authorities.

Implications of the study

The present study is the first of its kind, which explored perceived challenges of the COVID-19 vaccinators in central India. The duty schedule of vaccinators needs to be adjusted in the manner that they get at least one holiday in a week. Arrangement of basic amenities like toilet, drinking water, and refreshment during vaccination has to be taken care of with the help of local governance or the health system. Sustained and effective community engagement may help in addressing community concerns regarding the COVID-19 vaccination campaign, more so in tribal dominant districts like Shahdol. The programme needs to consider monetary incentives and a better ecosystem for digital data handling for the vaccinators.

India has managed routine and campaign mode vaccination for childhood preventable diseases (like pulse polio, supplementary immunization activity for the second dose of measles vaccine, mission *Indradhanush*) before NCVP with reasonable success, where prior microplanning, effective communication strategies, and community mobilisation were emphasized.[30] Following these principles, NCVP, too, could have been planned as an add-on activity to the existing vaccination programme or conducted in pulses (like pulse polio) at least for the high-risk groups (age >45 years). This could have addressed many challenges as perceived by the vaccinators in this study. This is beyond the scope of this study and may be explored in the future.

Conclusion

To explore the perceived challenges of COVID-19 vaccinators of district Shahdol, the district health authority conducted one day workshop with them. In the first phase, a free listing exercise was performed to list out their perceived challenges that are prominent and representative of the cultural domain. A total of 14 items were identified as perceived challenges for COVID-19 vaccinators. The top three perceived challenges were overtime duty, no holidays, and lack of monetary incentive. In the second phase, a pile-sorting exercise with the challenges mentioned in the above step was performed. The 14 perceived challenges were clustered into five groups: 1) beneficiaries related issues. 2) vaccination schedule related issues, 3) lack of facilities at vaccination site, 4) lack of monetary incentive, and 5) issues related to digital data handling. In the third phase, the transcript generated during the discussion on the free listing and pile sorting exercises was used for the thematic analysis to keep the context in consideration and to find a plausible explanation of the findings of the above two phases. We recommend a judicious duty schedule, arrangement of basic amenities like toilet, drinking water, and refreshment during vaccination sessions, effective community engagement to address the vaccine hesitancy, and, if possible, considering monetary incentives for the vaccinators.

Acknowledgments

We thank Chief Medical and Health Officer Shahdol, Dr. M.S. Sagar and his office for the administrative and logistic support during the study. We express our thanks to Sumit Kumar Tripathi, Government Medical College Shahdol, India, and Sandeep Kumar Patel, District Monitoring and Evaluation Officer, District Health System, Shahdol, India, who helped in the data collection process. We also express our gratitude towards the Department of Community Medicine, Government Medical College Shahdol, India, for providing technical support all through the inception, conducting, and writing of the study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Dhama K, Patel SK, Pathak M, Yatoo MI, Tiwari R, Malik YS, *et al.* An update on SARS-CoV-2/COVID-19 with particular reference to its clinical pathology, pathogenesis, immunopathology and mitigation strategies. Travel Med Infect Dis 2020;37:101755.
2. Sah R, Shrestha S, Mehta R, Sah SK, Rabaan AA, Dhama K, *et al.* AZD1222 (Covishield) vaccination for COVID-19: Experiences, challenges, and solutions in Nepal. Travel Med Infect Dis 2021;40:101989.
3. Gianfredi V, Pennisi F, Lume A, Ricciardi GE, Minerva M, Riccò M, *et al.* Challenges and opportunities of mass vaccination centers in COVID-19 Times: A rapid review of literature. Vaccines (Basel) 2021;9:574.
4. MacPherson Y. What is the world doing about COVID-19 vaccine acceptance? J Health Commun 2021;25:757–60.
5. NY Times Coronavirus vaccine tracker. 2021. Available from: http://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker. [Last accessed on 2021 Jan 31].
6. (MoHFW). My Gov: Government of India. Ministry of Health & Family Welfare Government of India. 2021: Updates and Notifications. Available from: https://transformingindia.mygov.in/covid-19/. [Last accessed on 2021 Oct 26].
7. Office of Commissioner & Registrar General of the India. Population Census 2011: Shahdol district. 2016. Available from: https://www.census2011.co.in/census/district/327-shahdol.html. [Last accessed on 2018 Jul 14].
8. (GoI). Madhya Pradesh Election Comission. Government of Madhya Pradesh. 2021. Available from: https://mplocalelection.gov.in/. [Last accessed on 2021 Oct 26].
9. Ministry of Health and Family Welfare (MoHFW). Co-WIN: Winning over Covid-19. 2021. Dashboard: India/Madhya Pradesh/Shahdol. Available from: https://www.cowin.gov.in/. [Last accessed on 2021Oct 27].
10. Panchal S, Wani RJ, Chauhan K, Wani V, Manihar P. Challenges and concerns in setup of COVID vaccination centre: Experience from 2 centres in Mumbai. Indian Pract 2021;74:18–23.
11. Mallik S, Mandal PK, Ghosh P, Manna N, Chatterjee C, Chakrabarty D, *et al.* Mass measles vaccination campaign in aila cyclone-affected areas of West Bengal, India: An in-depth analysis and experiences. Iran J Med Sci 2011;36:300-5.
12. Vaghela G, Narain K, Isa MA, Kanisetti V, Ahmadi A, Lucero-Prisno DE, *et al.* World's largest vaccination drive in India: Challenges and recommendations. Health Sci Rep 2021;4.
13. Office of Commissioner & Registrar General of the India. Census of India 2011. Madhya Pradesh: District Census Handbook Shahdol. Directorate of Census Operations Madhya Pradesh. 2016.
14. National Heath Mission (NHM). Immunization handbook for medical officers. New Dehi; 2017.
15. National Heath Mission (NHM). Introduction of measles-rubella vaccine campaign and routine immunization: National operational guidelines 2017. New Dehi; 2017.
16. National Heath Mission (NHM). COVID-19 vaccines operational guidelines. New Delhi; 2021.
17. Dongre A, Deshmukh P. Practical Guide: Qualitative Methods in Health and Educational Research. 1st ed. Chennai: Notion Press; 2021. p. 69–88.
18. Romney AK, Weller SC, Batchelder WH. Culture as consensus: A theory of cultural and informant accuracy. Am Anthropol 1986;88:313–38.
19. Dongre AR, Deshmukh PR. Farmers suicide in Maharashtra, India: A qualitative exploration of their perspectives. J Inj Violence Res 2011;3:2–6.
20. Visual Anthropac: Version 1.0.2.60. Software for Cultural Domain Analysis: Pilesorts; 2003.
21. Saldana J. The Coding Manual for Qualitative Research. Los Angeles: Sage Publication; 2010.
22. Dongre A, Deshmukh P. Practical Guide: Qualitative Methods in Health and Educational Research. 1st ed. Chennai: Notion press; 2021. p. 127.
23. Dongre A, Deshmukh P. Practical guide: Qualitative methods in health and educational research. 1st ed. Chennai: Notion press; 2021. p. 121–34.
24. Agrawal A, Kolhapure S, Di Pasquale A, Rai J, Mathur A. Vaccine hesitancy as a challenge or vaccine confidence as an opportunity for childhood immunization in India. Infect Dis Ther 2020;9:421–32.
25. Sprengholz P, Henkel L, Betsch C. Payments and freedoms: Effects of monetary and legal incentives on COVID-19 vaccination intentions in Germany. Germany; 2021.
26. Seal KH, Kral AH, Lorvick J, McNees A, Gee L, Edlin BR. A randomized controlled trial of monetary incentives vs. outreach to enhance adherence to the hepatitis B vaccine series among injection drug users. Drug Alcohol Depend 2003;71:127–31.
27. Campos-Mercade P, Meier AN, Schneider FH, Meier S, Pope D, Wengström E. Monetary incentives increase COVID-19 vaccinations. Science 2021;374:879-83.
28. Agarwal AK, Sengar A, Gupta P, Mahore R. MR vaccine campaign in India: Get ahead success. South Asian Res J Med Sci 2019;1:51-5.
29. Deutsch N, Singh P, Singh V, Curtis R, Siddique AR. Legacy of polio—use of India's social mobilization network for strengthening of the universal immunization program in India. J Infect Dis 2017;216(Suppl 1):S260–6.
30. Scott A, Sivey P, Ait Ouakrim D, Willenberg L, Naccarella L, Furler J, *et al.* The effect of financial incentives on the quality of health care provided by primary care physicians. Cochrane Database Syst Rev 2011;(9):CD008451.

Annexure 1

Transcript of participants explaining their perceived challenges

Date: 12/10/21

Table 1: Characteristics of vaccinators who participated in the free listing and pile-sorting exercises during the workshop conducted by district health system Shahdol, India, on 12 October 2021

Name	Age	Designation	Posted Block	Work-place (Rural/ Urban)	Work experience (In years)
XXXXXX	50	LHV	Sohagpur	U	15
XXXXXX	53	ANM	Urban Shahdol	R	26
XXXXXX	41	ANM	Gohparu	R	13
XXXXXX	45	ANM	Gohparu	R	19
XXXXXX	40	ANM	Burhar	U	12
XXXXXX	29	ANM	Sohagpur	U	6
XXXXXX	38	ANM	Sohagpur	R	2
XXXXXX	34	ANM	Sohagpur	U	1
XXXXXX	29	ANM	Sohagpur	U	6
XXXXXX	37	ANM	Sohagpur	R	13
XXXXXX	46	ANM	Sohagpur	R	21
XXXXXX	43	ANM	Sohagpur	R	11
XXXXXX	48	ANM	Sohagpur	R	29
XXXXXX	32	ANM	Jaisinghnagar	U	7
XXXXXX	28	ANM	Burhar	R	5

Footnote: LHV: Lady Health Visitor, ANM: Auxiliary Nurse midwife, R: Rural, U: Urban

Participant #1
Age: 50 Y
Designation: LHV
Experience on the designation: 15
Work place: U

Whenever I use to visit the session site for supportive supervision, there is hardly any arrangement for hand washing.

People don't want to wait [for vaccination]. If there is only five beneficiaries, we used to ask them to wait for a while so that 10 people get accumulated so that we can open out [vaccine] vial. But people don't wait & return back.

Participant #2
Age: 53 Y
Designation: ANM
Experience on the designation: 26
Workplace:

Some people don't get vaccinated at villages. They feel that once they get vaccinated, they scum to fever. Few people used to say after vaccination we won't be able to produce children or vaccination may cause chronic illness.

Our duty schedule is from morning 9.00 AM to evening 6.00 PM

There is no arrangement of hand washing at session site.

We were asked to do door to door vaccination.

At every session site there must be two ANMs (as vaccinators) instead of one.

Participant #3
Age: 41
Designation: ANM
Experience on the designation: 13
Workplace:

Many people from villages believe that after vaccination they will succumb to fever, even they have misbelieved that people may die due to vaccination.

People from villages used to say that after vaccination they will not be able to produce children, our relatives has asked not to vaccinate otherwise you will suffer from long term illness.

Larg gathering of crowd at the vaccination session site causes hinderance [in vaccination].

Please suggest some way out [regarding our long time duty hours] for time because our duty schedule is from 9 am to 5 pm. Many times we have to stay there till 7.00 pm.

At session site there must be two ANMs (as vaccinators) instead of one.

At vaccination site, where we are posted there is no basic facility [toilet, hand washing, food etc.].

Participant #4
Age: 45 Y
Designation: ANM
Experience on the designation: 45
Workplace: R

We used to perform our vaccination related duties almost daily, even on holidays.

The time of vaccination is 8 hours, this time duration must be reduced.

The transportation [to reach & come back from session site] also takes time.

Beneficiaries need to be motivated very hard [to get vaccinated]

Beneficiaries get motivated by the ASHA and anganwadi workers, if they don't then we used to motivate [for vaccination]. Neither ASHA, anganwadi or we get any *Protsahan rashi* [monetary incentive] for this. Now we are tired of this[motivation]. Now we feel, those who want to get vaccinated will self-come & get vaccine. Even those who came for vaccination used to shout at us.

We also have problem when vaccine get wasted because of 10 baneficiaries could not get accumulated.

When beneficiaries didn't reach to session site we used to face problems.

There is no arrangement for food & drinking water at session site.

Participant #5
Age
Designation
Experience on the designation

Please don't schedule our duty in Covid vaccination from 9.00 am to 5.00 pm, it is very hard on us, sometime we used to reach our home by 8.00 pm.

While vaccinating 350 or more people in a single day is huge task. It causes back ache & pain over hands and also we didn't find any time for meal. *[during duty hours].*

We should get holidays on Sunday and government holidays.

Participant #6
Age
Designation
Experience on the designation

Covid vaccination session should be held only from 9.00am to 5.00 pm. Time flies so fast, we work even till 8.00 pm. There is no arrangement for meals and drinking water for the vaccinators during the session. While vaccinating 350 or more people in a single day is huge task. It causes back ache & pain over hands.

We should get holidays on Sunday and government holidays.

Participant #7
Age
Designation
Experience on the designation

There is no arrangement for hand washing during vaccination session.

There is no arrangement for toilet facility at covid-19 vaccination session site.

ANC mothers used to blame vaccination for abortion, if any.

If beneficiaries get fever after vaccination, they refuse to take second dose of vaccine.

The timing of vaccination session should be from 10.00 am to 5.00 pm only, it used to remain continue till 6.00 or 7.00 pm and we get pressurized from above that the entry in ANMOL app is not being made

[When we further explain how the timing of vaccination session affecting Data entry in ANMOL app, they suggested because of long duration of vaccination session they don't find time for other works like entry in other portals like ANMOL]

Memo: It seems almost all the vaccinators has some issues with data entry in ANMOL app, may be poor training or poorly design app or some other factors are responsible for it which must be further explored. Investigators didn't explore it any further, as it was beyond the objective of present study.

Participant #8
Age
Designation
Experience on the designation

Vaccination session are being planned even for holidays. Our routine activities like ANC care & child vaccination get affected because this. We must get one holiday in a week.

There is no arrangement of meals and drinking water [despite] we used to sit [at vaccination site] from 9.00 am to 7.00 pm.

We cannot spare time with children in our home because of Covid vaccination.

During Covid-19 vaccination session we remain in mental stress.

Memo: This Mental stress might be because of no arrangement of toilet facility, meals & drinking water at session site. It might also be due to door-to-door vaccination, mob handling during session and long duty hours.

Participant #9
Age

Designation
Experience on the designation

We request, please don't put our name in duty roaster during our VHND, so that our field work doesn't get affected.

Vaccination session shouldn't be held on holidays.

Our duty should be from 10.00 am to 5 pm. When it extends overtime, causes a trouble to reach home from session site. I used to come from far, returning home always causes trouble. Lack of facility for meals & drinking water also causes trouble to us. At some places there is no toilet facility at session site which is very troublesome for us.

Vaccination session should be held for two days in a week rather than daily, because people didn't turn up. And, this will be convenient for us also.

Working daily, even on holidays feels mental torture.

We used to get pressurize to do overtime duty [during covid vaccination session]. We didn't even get any monetary incentive for holding session far from our routine posting place.

Participant #10
Age
Designation
Experience on the designation

Vaccination related activities remain continue for more than 8 hours, which causes trouble to us.

Beneficiaries opposes if we used to ask them to stay for half an hour after vaccination.

Vaccination sessions are being held on Sundays and government holidays.

We were forced to do door-to-door vaccination, but it compromises effectiveness of vaccine because it's very difficult to maintain temperature of vaccine during this.

"*Ek mahila vaccinator hone ke naate mujhe ye pareshaniyan hoti hai" Means [Being a female vaccinator, I feel these problems*

Motivation & mobilization of beneficiaries by officials [and workers] of different department is lacking because they don't take interest in it, some even say its none of their business it is job of health department. It affects our work significantly.

There is no arrangement of tea & snack during vaccination session, it causes a bit problem for us.

I don't feel comfortable while working as [data] verifier in Co-win portal.

Participant #11
Age
Designation
Experience on the designation

We used to vaccinate people even on holidays.

Non-availability of any source of mobility to & from vaccination site causes a lot of trouble

There is no time limit for vaccination session. It is told that the schedule time is 9.00 am to 5.00 pm but often it extends beyond that.

There is almost no difficulty in duty but duty hours has to be fixed.

Participant #12

Age
Designation
Experience on the designation

There is no facility for meals & drinking water during vaccination session, it causes trouble. NHM office has instructed the local authorities for renumeration of worth Rs 100/ vaccinator during session, but we could get that.

There is no time for lunch during vaccination session. Even when we carry lunch box with us, didn't find time for it. Beneficiaries used to tease us when we use to have our lunch.

Schedule time for vaccination is 9.00 am to 5.00 pm but often it extends beyond that.

We are conducting vaccination sessions almost daily since 16th January, still we didn't get any monetary incentive for that.

As the vial of vaccine contains 10 doses and an open vial doesn't last longer so as per guidelines we used to wait before opening the vial so that 10 beneficiaries get gathered at session site. During this process many beneficiaries starts arguing with vaccinators & [data entry] operator as they don't want to wait.

We are put on [vaccination] duty even on Sundays and government holidays.

Conducting covid vaccination session takes toll on us physically and mentally. If we could manage to wake up early in the morning, then only we can cook food and carry a lunch box with me otherwise we have to fast from 9.00 am to 5.00 pm.

Vaccination session campaign of Covid-19 is so extensive that we couldn't carry out our routine duty related to other Nation programmes, ANC care & home visit to sick children. Also we didn't find time to make entry in ANMOL portal, consequently we are the one who are being held responsible for the same.

Participant #13
Age
Designation
Experience on the designation

We find difficulty to work as a verifier [data entry operator].

The schedule time of vaccination 9.00 am to 6.00 pm is too long.

Beneficiaries don't want to wait at vaccination session site, as they want vaccine has to be given them as soon as they reach and also, they don't want to wait half an hour after the vaccination.

Working daily without getting even single holiday, takes toll on body physically and mentally. We couldn't get adequate rest eventually it causes trouble in vaccination. Hence there must be one holiday in a week.

Maintaining effectiveness of vaccine while door-to-door vaccination is difficult.

When we conduct door-to-door vaccination people perceive it is our sole responsibility hence we (vaccinators) are pushing them for vaccination. So they don't want to come to the session site and also they don't want to take responsibility of their vaccination and health status.

There is absolutely no arrangement for refreshments, drinking water or meal consequently its very difficult to continue [Vaccination] session beyond 2.00 pm.

Participant #14
Age
Designation
Experience on the designation

Vaccination session shouldn't be held on Sundays. And also it [Vaccination session] shouldn't be held on government holiday either.

Time of vaccination session 8.00 am to 6.00 pm has to be revised so that we can arrange our meals and refreshments.

We couldn't get any monetary incentive for vaccination, please provide us same.

Time of returning from session site has to be preponed as the transportation [to reach & come back from session site] also takes time.

Our duty has to be put on the places [or nearby] where we are posted, it should nt be far away from our workplace.

Participant #15
Age
Designation
Experience on the designation

We should get holiday on Sundays.

We should also get monetary incentive.

Holding vaccination session from 9.00 am to 5.00 pm causes troubles so it has to be revised.

Beneficiaries don't talk to us in a respectful manner.

Hand washing facility has to be there [session site]

Vaccination by visiting door-to-door shouldn't be there.

Work related to covid vaccination causes mental stress.