

**Formative Research on
Perceptions Regarding Vaccine
for COVID 19**

A Qualitative Study in India

A Report

*Submitted to
UNICEF Country Office, India*

Revised version

May 5, 2021



Centre for Media Studies (CMS)

RESEARCH HOUSE

Saket Community Centre

New Delhi 110017



**CMS endeavours to
work towards equity,
social development
and transparency in
governance through
research, advocacy
and capacity building.**



Content

	Page No
PREFACE	i
EXECUTIVE SUMMARY	ii-v
CHAPTER 1: STUDY BACKGROUND AND METHODOLOGY	01-07
1.1 STUDY BACKGROUND.....	01
1.2 OBJECTIVES OF THE STUDY.....	03
1.3 STUDY APPROACH & LOCATION	03
1.4 RESEARCH TECHNIQUE AND INSTRUMENTS	05
1.5 STUDY PARTICIPANT GROUPS AND SAMPLE DISTRIBUTION.....	06
1.6 TRAINING OF STUDY TEAM AND DATA COLLECTION.....	07
1.7 LIMITATION OF THE STUDY.....	07
CHAPTER 2: KNOWLEDGE AND INFORMATION ABOUT COVID-19	08-13
2.1 POPULAR NAME, COMMON SYMPTOMS AND PRECAUTIONS.....	08
2.2 CURRENT AND RELIABLE SOURCES OF INFORMATION FOR COVID-19.....	09
2.3 PERCEIVED LEVEL OF THREAT FROM COVID-19	12
CHAPTER 3: COVID-19 VACCINE-PERCEPTION, EAGERNESS and HESITATION	15-31
3.1 PERCEPTION AND ACCEPTANCE OF COVID-19 VACCINE.....	15
3.2 PREFERENCE FOR NATURAL CURE VS. COVID-19 VACCINE.....	17
3.3 VACCINE EAGERNESS.....	18
3.4 WILLINGNESS TO PAY FOR COVID VACCINE.....	22
3.5 PRIORITY GROUPS FOR VACCINATION as perceived by Community and Health Warriors..._	23
3.6 VACCINE HESITANCY.....	25
3.7 INFORMATION NEEDED TO ADDRESS VACCINE HESITANCY AND MOTIVATE COMMUNITY_	27
3.8 PREFERRED SOURCE FOR INFORMATION ON COVID-19 VACCINE.....	28
3.9 COVID APPROPRIATE BEHAVIOUR POST-VACCINATION.....	29
CHAPTER 4: SUMMING UP AND RECOMMENDATIONS FOR COMMUNICATION STRATEGIES	32-38
4.1 MOTIVATING FACTORS.....	32
4.2 BARRIERS	32
4.2 CONCEPTUAL FRAMEWORK AND FINDINGS OF THE STUDY.....	33
4.3 RECOMMENDATIONS FOR MESSAGES AND COMMUNICATION STRATEGY.....	37

PREFACE

This is the only qualitative study done face to face on COVID-19 Vaccine across 5 states in India, as of date. This formative study validates a few of our intuitive understandings and findings from other local and global studies on the same. It also provides evidence for the comprehensive communication strategies for COVID vaccination developed by MoHFW and Partners.

The data collection and fieldwork of this study were conducted before the COVID-19 vaccination drive started in late December 2020. It provides many interesting insights and reasoning for current perceptions regarding various COVID issues, including vaccination especially, the perceived barriers and motivators for increasing confidence and trust in vaccination. These can be used in communication as and when the vaccination for the general public is initiated.

We are grateful to the UNICEF India C4D team, specifically Alka Malhotra, for partnering with CMS in conducting this study and for her guidance for the same. I like to also thank the CMS team led by Alok Srivastava for undertaking this crucial study under such tight deadlines and circumstances.

We hope that this study provides impetus to the work and efforts of various partners and the Ministry of Health & Family Welfare in communicating effectively on COVID-19 to various segments of citizens in India.

In solidarity,

Vasanti Rao, PhD

DG, CMS

www.cmsindia.org

EXECUTIVE SUMMARY

Background and Approach

Coronavirus disease (COVID-19) has caused significant numbers of mortality and morbidity in humans across the globe since 2019. India too is seeing an unprecedented adverse impact on all spheres of life, be it social or economic affecting all sections of the society, particularly the socio-economically marginalized and vulnerable section.

The present formative research was the **first-of-its-kind qualitative study conducted before the launch of the COVID-19 vaccination drive in India, wherein face-to-face interactions through Triads and In-depth Interviews with the general population and health warriors were conducted**. All COVID-appropriate protective measures were practiced by the study team members and participants. **The data collection for the study was undertaken between December 24, 2020, and January 4, 2021**, much before the COVID-19 vaccination drive among health warriors was initiated in mid-January 2021 in India. The study was conducted in **Andhra Pradesh, Bihar, Odisha, Madhya Pradesh and Rajasthan**. The study sample participants were **uniformly distributed across rural and urban locations, gender, age group and socio-economic classification (SEC) categories**. **In all, 120 Triads and 50 IDs at the community level and 25 KIIs with the health warriors were conducted across the five study states**.

The key **objectives of the study** were: to understand the perceptions and knowledge regarding safety and acceptance amongst the community about the COVID-19 Vaccine; to strengthen the understanding of confidence, trust, and communication about the COVID-19 vaccine. Besides, to gather insights that can help positioning the demand of the vaccine, and to assess aspects related to willingness to pay for the COVID-19 vaccine.

Key Findings:

Popular name: In most of the Triads as well as individual interviews, the participants, across states, locations, gender, age group and SEC identified COVID-19 as Corona, the commonly referred name in India. Other referred names were invisible power, China virus to name a few.

Symptoms: Almost all participants during group discussions were well informed about most often identified symptoms of COVID-19 such as, **fever, cold & cough, and body pain**. Other reported symptoms by some participants included loss of taste & smell, and breathlessness.

Precautions: High awareness about the commonly known precautions against COVID-19 were mentioned by the community members as well as the health warriors, such as **hand washing, wearing masks, and social distancing**.

Reliable sources of Information on COVID-19:

The Television and Newspaper, in urban locations for the updated news coverage, as well as views and opinion of prominent persons, were emerged as a major reliable source of information. Besides, frontline workers like ANMs and *Anganwadi* workers were also identified in slums and low-income colonies.

In rural locations, the ANMs and ASHAs, who are from the local community and are in regular contact with the community members were also found a reliable source of information. Other preferred sources were PRI members and TV.

The perceived threat from COVID-19 varied from state to state, as well as in rural and urban locations. Most of the participants during Triads, particularly in rural locations of all states, and youth, in both urban and rural locations, in most of the states perceived **low threat**, primarily due to the lesser number of COVID-19 infected cases reported in their community or neighbourhood. Other reasons included their faith in self-medication with herbs and the self-belief of strong immunity.

Moreover, with decreasing number of COVID-19 positive cases with each passing day across the states the perceived level of threat from COVID-19 is also diminishing at the community level.

Perception about Vaccine's Effectiveness: As vaccination drive against COVID-19 was yet to start, at the time of data collection for the study, most of the community participants during Triads and IDIs, irrespective of age, gender, and SEC across states, based on what they have read or heard about the development of vaccine, expressed **high confidence in vaccine's effectiveness, as it is developed under the close supervision of the government.**

- A few participants, however, across all study states, had **apprehensions on vaccine's effectiveness** due to lack of information available in the public domain on **side effects of the vaccine** or because they felt that vaccine is coming in a very **short period** and has **not been tested on all age groups.**

Eagerness to get Vaccinated: Most of the participants during Triads and IDIs, both men and women, in rural and urban locations across study states showed **eagerness to get vaccinated, as soon as available.**

- The people with limited resources will give preference to vaccines over other needs in the family, even if they have to pay.

Vaccine acceptance will be high, as it is expected (and preferred also by the community) that vaccination will be done at a government facility monitored by the government agencies. Preference for government facilities was due to a high level of confidence and trust. Reasons for trust include, easily accessible; better-trained health providers, no bias; genuine vaccine; and likely to be made available free or at a nominal fee.

Willingness to Pay: The majority want the COVID-19 vaccine to be made available free of cost, or at a nominal fee, particularly to those who are poor, both in rural or urban locations. Family size; loss of livelihood due to the COVID-19 pandemic and lockdown were key reasons cited to make the vaccine available free of cost.

Priority group for Vaccination: The community members were agreed with the government's decision that health warriors should be vaccinated first, before making the vaccine available for the general public, for the reason that health warriors are at a higher risk of getting infected. Other in priority groups were senior citizens and people with co-morbidity. Family members who go out for work, the main bread earners, were also identified as a priority group for vaccination.

- **Youth, children and women were considered the least prioritized group** for vaccination due to reasons like strong immunity (youth and children); don't go out frequently (women).

Vaccine Hesitancy: Participants did not disclose any self-hesitation for COVID-19 vaccination. However, from the community perspective, opined that initial hesitation is expected by some. Key reasons for vaccine hesitancy included fear of side effects; price of vaccine; accessibility of vaccination centre; the rumour about vaccine efficacy; perceived self-immunity; faith in naturopathy, among others. **No distinct hesitation for the COVID-19 vaccine was observed by any of the participants' profile criteria like locations, gender age group, or SEC.**

Motivating Factors and Barriers for Vaccination:

Motivating factors to go for vaccination, across states, will be the source of information on vaccination; the cost of the vaccine; ease of reaching vaccination centre; regular updates on AEFI, side effects, its severity, and success rate of a vaccine.

The barriers will include rumours, incorrect/partial information, the distance of vaccination centre (more in rural areas), complacency, and self-perceived notion about no threat from COVID-19 (particularly among the rural population and youth). Besides, trust in natural remedies also pose a challenge for the acceptance of vaccination

Women are not considered among the priority group for COVID-19 vaccination for the reasons cited that they have less interaction with the community and their movement is restricted. It was also feared that women may remain away from vaccination drive either on their own or forced by their family members.

Findings at a Glance

Across States

- Participants during Triads and IDIs in all 5 study states had similar low perceived threat of COVID 19. Only in Orissa, there was relatively higher perception of threat of COVID 19. Eagerness to get vaccinated as also similarly high among all states. Only in MP, among few youth groups and among participants from the Muslim community eagerness was found to be low, mostly due to their apprehension about vaccine's effectiveness and also about side effects of the vaccine. Similar reasons for vaccine hesitancy was observed in all states, like side effects, price (if any) distance/cost of accessing the vaccination centres and few due to misinformation on its effectiveness.
- For participants of the formative research, preferred sources of information across the study states are news (TV & Newspapers), and frontline health workers. On probing for other sources, almost in all groups, local leaders (PRI), Volunteers / NGOs and social media were mentioned by the participants. Participants in Rajasthan and Orissa also included mike announcements and mobile phone messages, as sources of information on COVID-19.

Urban & Rural Variations

- The perceived low threat of COVID was similar mostly among Urban and Rural participants of the formative research study. Only in MP and Rajasthan, differences were found between urban and rural participants. In these states, there was relatively low threat perception in rural areas due to low prevalence of positive cases.
- Eagerness to get vaccinated was also found high across urban and rural participants of group discussions. Relatively, vaccine hesitancy was high in urban areas than in rural areas as urban participants were found to be more worried about the side effects and effectiveness of the vaccine. The few participants in rural areas were hesitant due to the price of the vaccine and the cost (loss of wages, travel distance, etc) to get the vaccination.
- More participants from rural locations during discussions specifically mentioned health workers like ANM as well as PRI representatives as preferred source of information on COVID vaccine, though almost all study participants in urban and rural during group discussions identified health workers, news and local leaders/volunteers as their preferred sources of information. Social media was mentioned as preferred source by more people during discussions in urban areas.

Gender Differences

- No significant differences among men and women were found in their perceived threat perception due to COVID, or vaccine eagerness and hesitancy. Only in Rajasthan, differences were found in women participants perceiving higher threat to COVID than men.
- However, most participants of the study did not prioritize women and some even felt that women are relatively at low risk of exposure to COVID as they do not need to move out of their houses. Only in Bihar and Rajasthan there was little higher vaccine hesitancy noticed in women groups than in men groups, mostly due the uncertainty of the price of the vaccine.

Age Related Variations

- There was no difference across age groups in the low perceived threat of COVID. Only youth group in Andhra opined little higher perceived threat than the participants of other age groups.
- Vaccine eagerness was found to be lower among youth than across other age group participants in this study. This was also opined by elders who felt that the young have natural immunity to protect them against COVID. Even for Vaccine hesitancy, there was no significant difference among age categories.
- Sources of Information mentioned by participants in youth groups were similar to other age groups, however, more youth mentioned TV news, social media and mobile messages, as their preferred sources of information on COVID vaccine.

Health Warriors Responses

- Key Informant Interviews with health workers correspond to the findings of Triads & IDI conducted among general population across the five study states. The responses were similar, though reasoning was further elaborated by most health warriors.
- Among sources of information preferred for vaccines, health warriors mentioned health department bulletins, technical guidelines, online videos, trail reports, in addition to the common sources as also mentioned by general population participants. Regarding practice of CAB, health warriors felt it was not being taken seriously even now and doubted its practice would continue among general population after vaccination.

CHAPTER 1: STUDY BACKGROUND AND METHODOLOGY

1.1 STUDY BACKGROUND

The coronavirus 2 (SARS-CoV-2), also known by the provisional name 2019 novel coronavirus (2019-nCoV) has caused significant numbers of mortality and morbidity in humans with the **coronavirus infection diseases (COVID-19)**.¹ It is estimated that more than 1 billion people have been infected and has caused over 2.2 million deaths², paralyzing economies, cutting incomes and a sharp increase in unemployment. India too is seeing an unprecedented adverse impact on all spheres of life, be it social or economic affecting all sections of the society, particularly the socio-economically marginalized and vulnerable section of the society, who are the most sufferer. In India, as of January 29, 2021, there have been more than 10 million confirmed cases, leading to more than 154 thousand deaths.³

It is often said that it takes seventeen years to move medical research from bench to bedside. In a coronavirus disease (COVID-19) world, such time-lags feel intolerable. In these extraordinary circumstances, the effort is to make years into months.⁴ No doubt, unprecedented efforts were made to develop drugs to treat and prevent the disease and vaccines to immunize against COVID-19.

The present formative research was the first-of-its-kind of a qualitative study conducted before the launch of the COVID-19 vaccine, wherein face-to-face interactions with the general population happened using all COVID-appropriate protective measures. The data collection for the study was undertaken in the last week of December 2020, much before the COVID-19 vaccination drive among health warriors initiated in mid-January 2021 in India.

The research focused on four critical aspects, which include, 1) Vaccine Eagerness, Trust & Acceptance; 2) Vaccine Hesitancy; 3) Preferred source of Information and communication messages on Vaccine; and 4) Willingness to Pay for Vaccine.

Since variance in **eagerness for vaccine** uptake prevails, it is important to note that public decision-making is driven not only by scientific or economic evidence alone, but is also driven by a mix of psychological, sociocultural, and political factors. It is crucial to take all the factors into account in order to address the issue around vaccine uptake.⁵ Thus, eagerness to get vaccinated against COVID-19 is likely to be highly influenced by the perceived level of threat from COVID-19, trust, and acceptance of vaccine and vaccine providers.

While on the other hand, **vaccine hesitancy (VH)** is believed to play a critical role in the success of the vaccination drive. VH is a behavior, influenced by several factors including issues of confidence

¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7235517>

² https://www.worldometers.info/coronavirus/?utm_campaign=homeAdUOA?Si%3Ca%20href (last accessed on January 29, 2021)

³ Aarogya Setu App, accessed on November 20, 2020

⁴ <https://doi.org/10.1186/s12961-020-00571-3>

⁵ Larson, H. J., Cooper, L. Z., Eskola, J., Katz, S. L., & Ratzan, S. (2011). Addressing the vaccine confidence gap. *The Lancet*, 378(9790), 526–535. [https://doi.org/10.1016/s0140-6736\(11\)60678-8](https://doi.org/10.1016/s0140-6736(11)60678-8)

(do not trust vaccine or provider), complacency (do not perceive a need for a vaccine, do not value the vaccine), and convenience (access).

Vaccine hesitant individuals are a heterogeneous group who hold varying degrees of indecision about specific vaccines or vaccination in general. Vaccine hesitant individuals may accept all vaccines but remain concerned about vaccines; some may refuse or delay some vaccines; some individuals may refuse all vaccines.⁶

Refusing or delaying vaccination contributes to gaps in vaccine uptake and immunization coverage—a significant factor in controlling or eliminating vaccine-preventable diseases (VPDs). As was observed during the polio vaccination campaign, VH is not only a threat to the elimination of VPDs (e.g., measles, polio etc.) but is also a major factor contributing to the re-emergence of such diseases. There may be multiple factors stimulating VH, depending on the context, individuals and specific features of the vaccines.⁷ Also, important to mention that adult vaccination coverage in India is generally believed to be for the poor.⁸ Further, over 2/3rd of Indian adults are not aware of adult vaccination, many think that vaccines are only for children. To add to it, there are limited infrastructure and systems for adult immunization in India.⁹

⁶www.who.int/immunization/sage/meetings/2013/april/1_Model_analyze_driversofvaccineConfidence_22_March.pdf

⁷ Agrawal A; Kolhapure S.; Pasquale A D; Ray J; Mathur A (2020): Vaccine Hesitancy as a Challenge or Vaccine Confidence as an Opportunity for Childhood Immunisation in India.

⁸ Verma R, Khanna P, Chawla S (2015): Adult immunization in India: importance and recommendations. *Hum Vaccin Immunother.* doi:10.4161/hv.29342.

⁹ Aggarwal K K: Majority of Indians are unaware of adult vaccinations. <http://blogs.kkaggarwal.com/2017/11/vaccinations>.

Along with eagerness and hesitation, the **source of information and messages communicated** also makes a lot of impact on the community to get motivated for availing the services, vaccination in the present case. Along with the content of the information disseminated, studies have shown that the **source of information plays a crucial role in influencing vaccination rates**.¹⁰ It is critical that information sources are relevant and appropriate for the target group. At the same time it is commonly recognized that information source and trust are closely related each other, since trust is a critical concept for understanding why some sources of information on vaccination are consulted more than others¹¹.

Keeping these aspects in to consideration, the formative research was undertaken by CMS on behalf of UNICEF India to identify the motivators and risks perceived by different groups of people and to be prepared to manage them beforehand.



Triad with a male group

¹⁰ Gargano, L. M., Underwood, N. L., Sales, J. M., Seib, K., Morfaw, C., Murray, D., DiClemente, R. J., & Hughes, J. M. (2015). Influence of sources of information about influenza vaccine on parental attitudes and adolescent vaccine receipt. *Human Vaccines & Immunotherapeutics*, 11(7), 1641–1647. <https://doi.org/10.1080/21645515.2015.1038445>

¹¹ Yaqub, O., Castle-Clarke, S., Sevdalis, N., & Chataway, J. (2014). Attitudes to vaccination: A critical review. *Social Science & Medicine*, 112, 1–11. <https://doi.org/10.1016/j.socscimed.2014.04.018>

1.2 OBJECTIVES OF THE STUDY

The key objectives of the study were

- To understand the perceptions and knowledge regarding safety and acceptance amongst the community about the COVID-19 Vaccine
- To strengthen the understanding of confidence, trust, and communication about the COVID-19 vaccine and gather insights that can help to position the demand for the vaccine
- To assess aspects related to willingness to pay for the COVID-19 vaccine among different population groups

1.3 STUDY APPROACH & LOCATION

The study adopted cross-sectional qualitative research using grounded theory methodology. The study was conducted in five states of India namely Andhra Pradesh (AP), Bihar, Madhya Pradesh (MP), Odisha and Rajasthan. covering both rural and urban locations, having gender and age group representation in the sample participants from different socio-economic classification (SEC).

The selection of the study states was done on the following criteria:

- From different geographical regions
- State with a high incidence of COVID-19 cases compared to other states in the region
- UNICEF Priority states

The selection criteria of two districts within the state included:

- One district with a high incidence of COVID-19 cases¹²
- The second district is adjoining, selected to have a different perspective from a district that may not have a high incidence of COVID-19 cases, as compared to the first district.
- Either of the selected districts has ST population (in whichever states possible)



¹² <https://COVIDindia.org/>

The study states and districts are

State	District 1	District 2
Andhra Pradesh (AP)	West Godavari	Guntur
Bihar	Bhagalpur	Purnia
Madhya Pradesh (MP)	Indore	Jhabua
Odisha	Cuttack	Mayurbhanj
Rajasthan	Jaipur	Dausa

It is pertinent to mention that Bihar was purposively selected (instead of UP) for two reasons: one, high incidence of reverse migration during COVID-19 pandemic-related lockdown; and two, in UP, already an ongoing study of UNICEF with similar objectives is being conducted. Within each selected district, both urban and rural locations were selected.

Selection of rural locations: Two villages within an average radial distance of 10-15 km from the district Headquarters were selected. The selection of villages, which is not near the district headquarters, helped in assessing the flow of information on COVID and vaccine as well as supply-driven expectations and hesitations in the population, in locations that are not in proximity to health facilities at district HQs. Within a selected village, the opinion leaders like PRI members or FLWs were contacted to inform about the study and also to identify, different hamlets/habitations in the village, which generally get formed based on social group and natural geographies. Efforts were made to have the participation of men and women from different habitations in the study sample meeting the desired criteria such as age group, gender and social group.

Selection of urban locations within a district was done in consultation with influential/knowledgeable residents such as ULB members; frontline workers, to identify 3-4 localities of different SEC categories in the district HQ. Within the selected localities, the study participants were selected purposively depending upon the gender, age group and SEC. Only one member from a household was selected to participate in triad/IDI. However, no discrimination was made in the selection of a potential participant due to any other factor other than the defined inclusion criteria for the triad/IDI. The SEC was assessed by the study team by enquiring about their occupation, house ownership (own/rented) vis-à-vis locality visited.

1.4 Research Technique and Instruments

CMS conducted Triads and In-depth Interviews (IDIs) among community members.

In the prevailing restrictions and protocols to be adhered to due to COVID-19, the Triad method was preferred over group discussion with a bigger group of participants.

By using Triad method for discussion with a group of three participants, COVID-19 safety measures could be ensured such as minimal gathering at a place; maintain physical distance between participants and place of discussion is well ventilated.

At the same time, the Triad method ensured the free exchange of opinions and views of all the three participants in each triad for better insights on the issues of discussion. As compared to a bigger group, Triads were conducted in relatively lesser time and in a smaller space/room, which was easily available in the vicinity of the participants' residence.

Each Triad comprised of participants of the same location, gender, age group and SEC. However, not more than one participant from a household was selected in the study.

With participants from SEC A and B, IDIs were conducted (see chart and table below). Based on experience and prevailing situation, IDI was found to be a more suitable method to interact with professionals in urban locations, who found it convenient to be interviewed at their home or workplace, as per their time and place preference.

Along with this, CMS conducted Key Informant Interviews (KIIs) with **health warriors**, which included medical doctors and frontline health workers (FHWs) in both urban and rural locations of each state.

All discussion guidelines were developed in English and vernacular languages (Hindi/Odia/Telugu) largely spoken in the study states.

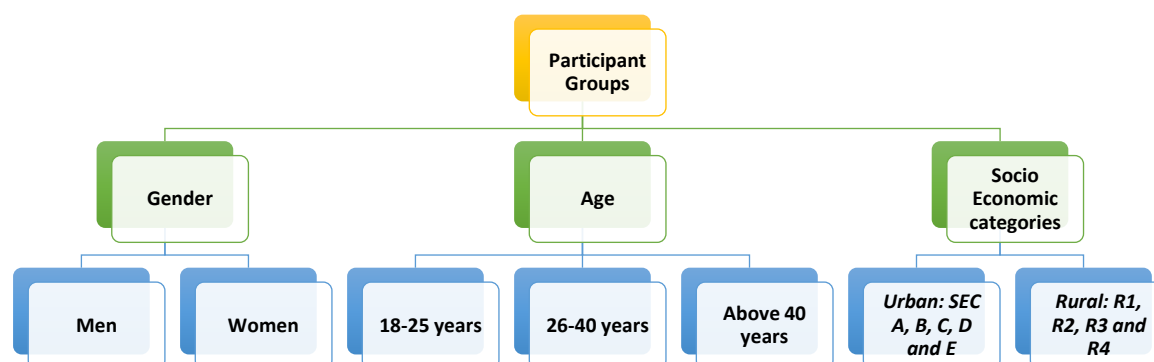
Detailed field notes were prepared of each Triad/IDI/KII. Post data collection, all information was collated and tabulated in a [Parameter Matrix developed in MS Excel sheet](#). The data against each area of enquiry was categorised by state, location and key demographic profile to understand and analyse the views and opinion, ensuring that all nuances are well captured while presenting the findings.

This report is presented to highlight findings as per the key areas of inquiry. Any noticeable reflection by either state, location or age, gender and SEC of participants are highlighted in the report along with the overall findings for each parameter of the study.

1.5 Study Participant Groups and Sample Distribution

The participant group of the study included adult men and women from different age groups and SECs across urban and rural locations of each study state.

Flow Chart: Participant Group by Demographic Parameters



CMS team achieved the proposed sample of 12 triads each in urban and rural locations of each state. This ensured almost similar representation of men and women, different age groups in the sample.

As the research focused on decision making at the individual and family level, only adults were selected as the study participants, who are likely to be a decision-maker for self and/or influence the decision making of their family members and to some extent at the community level as well.

In addition, in each state, CMS conducted in-depth interviews in urban locations with men and women belonging to SEC A and B. In each state, 10 IDIs (5 with men and women each were conducted).

Table: Sample distribution per State and Overall

Age group (in yrs.)	Urban		Rural		Total	
	Triads (SEC 'C' & below)					
Gender	Male	Female	Male	Female	Male	Female
18-25	2	1	2	1	4	2
26-40	2	3	2	3	4	6
40+	2	2	2	2	4	4
Total-per state	6	6	6	6	12	12
Total-Overall	30	30	30	30	60	60
IDI (SEC 'A' & 'B')						
30-50	3	3			3	3
50+	2	2			2	2
Total-per state	5	5			5	5
Total-Overall	25	25			25	25
KII (Health Warriors)						
Total-per state	2			3	5	
Total-Overall	10			10	25	

Overall, **120 triads and 50 IDIs** were conducted. Along with this, key Informant Interviews (KIIs) with health warriors i.e. medical doctors, ANMs and ASHAs in each state, were conducted. Five KIIs with health warriors were conducted in each state. In all **25 KIIs with Health warriors** were conducted.

1.6 Training of Study Team and Data Collection

Interactive training sessions for the study team was conducted using both face-to-face and virtual mode of training. The training was conducted in the third week of December 2020. **The data collection for the study across the five states was carried out between December 21, 2020, and January 4, 2021.**

CMS team members for data collection had a rich experience of more than 10 years in studies of qualitative nature and proficiency in the local language of the study states. During the orientation of the team, the dos and don'ts of qualitative research were emphasized, objectives of the study, sample selection approach, how to prepare detailed field notes, collation of information, capturing verbatim quotes and phrases used by the participants was reinforced again and again during the training session.

Specifically, **ethical principles for human subject's research and COVID Appropriate Protection measures** were discussed in detail during the training session to ensure community members' voluntary participation, the confidentiality of their views and opinion, and the safety of both study team members as well as the participants of the study.

1.7 Limitation of the Study

Due to COVID-19 protective measures and protocols, no person who was either detected as COVID-19 positive or her/his family member was included as a study participant. This may have limited the study findings to capture their perception and willingness to go for vaccination, once recovered.

Also, few participants of the triad may not have expressed their opinions openly and/or got influenced by the opinions of other participants.

CHAPTER 2: KNOWLEDGE AND INFORMATION ABOUT COVID-19

The chapter discusses in detail the findings related to community members' awareness about COVID-19, symptoms and precautions along with the perceived level of threat from COVID-19 at a community level, and the sources of information on COVID-19. The findings are further supplemented and complemented with the views and opinions of health warriors covered under the study.

2.1 Popular Name, Common Symptoms and Precautions

Popular name: Participants of Triads and IDIs across states, in rural or urban locations and demographic parameters such as gender, age group or SEC, were fully familiar with COVID-19.

Most of the study participants identified COVID-19 as Corona, the commonly referred name in India.

A few other names for COVID-19 also came up in different groups during the discussions. In Odisha, in a group, it was referred to as 'Invisible Power' (*adrishya shakti*), while in AP, a few named it as 'china virus'.

A few in Bihar, MP and Rajasthan spontaneously explained the suffixed '19' as the year (2019), in which it was first traced as a virus.

Symptoms: People were well informed about the most often identified symptoms of COVID-19.

Most participants were aware that it is a contagious virus, which spreads through touch and air, from one person to another.

Yeh ek bhayankar veshiek bimari hai jisse poori duniya grasit hai. Isko corona mahamari ke naam se jana jata hai. Iska prabhav 2019 me dikhna shuru hua tha isliye isko COVID 19 kahete hai"

(This is a dangerous disease that has affected the world. This is known as Corona Epidemic. This disease was originated in 2019 and hence is called COVID-19.)

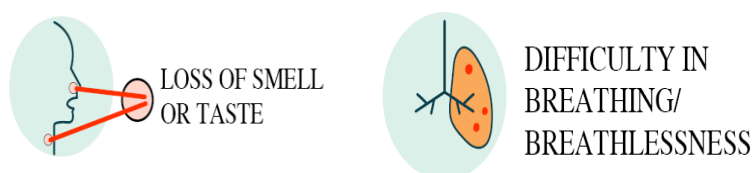
-Triad, Female, 55 years, Urban, Bihar



Across the participant groups, irrespective of location, age or gender, the **majority of the participants identified commonly reported symptoms such as**



Other identified symptoms by some participants were



"We advise people not to sit in a group, do not pamper child with hands like kissing, do not travel unnecessary"

-KII, ASHA, Rural, AP

In MP, diarrhoea and skin rashes, or dis-colouring of fingers and toes were also reported as symptoms. While in AP, itching in throat, a loose motion was also cited as symptoms of COVID-19.

Precautions: High awareness about the precautions to be followed to protect from getting infected from COVID-19 was found among people across demographic parameters.



The commonly known precautions against COVID-19 were mentioned by the community members as well as the health warriors, such as **hand washing using soap, wearing masks, and social distancing**



“Hum logo ko mask lagane ko kahete hai. Do meter ki doori rakhne ko bolte hai. Hum khud bhi apne gloves field se aane ke baad mitti me daba dete hai”

(We advise people to wear mask. Maintain two meters’ distance with others. We also bury our gloves in soil after coming from the field)

-KII, ASHA, Rural, Odisha

Some additional precautions suggested by the community participants seems to be more **influenced by naturopathy**, such as inhaling vapour steam; drinking hot water/turmeric milk/lemon water; taking shower/bath after coming home from outside; having vegetarian food; avoiding chilled food items (Rajasthan); Vitamin- C rich food, green vegetables (Odisha); Kada/tea- a mix of ginger, black pepper, tulsi, *ashwagandha* (Bihar); *Mahua* (butter fruit) based alcohol (tribal in MP and Odisha), among others.

Health warriors also shared some of the precautions that they usually advise people to practice. These included, **avoid going to crowded places, avoid touching mouth, disinfecting everyday items before use, avoiding handshake** were some of the often mentioned precautions by health warriors.

2.2 Current and Reliable Sources of Information for COVID-19

Despite lockdown in the initial months after the emergence of the COVID-19 pandemic, the participants reportedly had access to information on COVID-19, in both rural and urban locations.

Among the source of information, which was multiple mediums but common across states and participants, was **TV and Newspaper**.

During lockdown as well as in different phases of un-lockdown, the frontline health workers, such as **ANMs and ASHAs**, particularly in rural areas of all

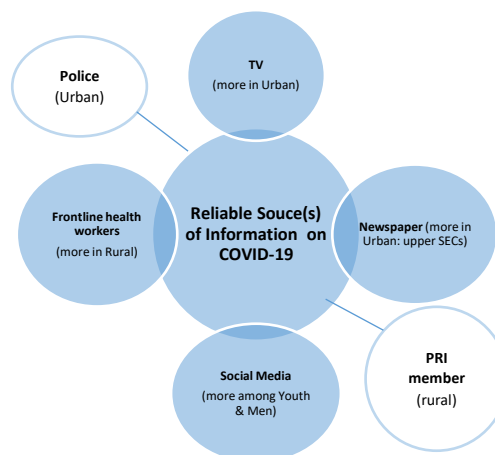
states were an important and reliable source of information for the general public. PRI members were also identified as an important source to keep the public informed about COVID-19 related updates.

Social media apps like WhatsApp and Facebook, also played an important role to disseminate information on COVID-19.

Noticeably, the police personnel, who were responsible for ensuring law & order in their respective areas, played an important role as a source of information on COVID-19, as reported by many participants in the study states.

For some, even the caller tune on mobile phones or the initiative taken by municipal body in Rajasthan to use garbage collection van for playing recorded audio messages, as well as wall paintings were also a source for information on COVID-19.

In female groups, a **few participants in MP and Rajasthan, mentioned their husbands as a source of information on COVID-19**, as they used to move out and interact with other community members.



“TV channel par vistrat jankari milti hai. Ispar Pradhan mantri man ki baat karte hai, isliye ispar vishvas jyada hai”

(We get detailed information on TV, Pradhan mantri also talks about it in ‘Man ki baat’, therefore this is most trusted source)

-Triad, Female, 40+ years, Urban, Rajasthan

Among reasons cited for trust on their sources of information include,

- **Television and Newspaper, particularly in urban locations** for the updated news coverage as well as prominent persons like the Prime Minister of the country or senior doctors and health experts' views are telecast or reported through these mediums.
- **In rural locations, the ANMs and ASHAs** were found an important source of information across the age groups, as they belonged to the local community and have regular contact with the community members through meetings and home visits.

“Sarkari hospital ke ASHA aur ANM samudaye mai ghar ghar aa kar sahi jankari dete hai. Inko training mili hoti hai. Inke dwara di jane wali jaankari logo ko faeda deti hai”

(ASHA and ANM goes door to door, visit each house and share correct information. They get proper training for it and information given by them is beneficial for people)

-IDI, Female, 50+ years, Urban, MP

However, some participants shared their preference for newspapers and health warriors over TV as they opined that TV news channels present exaggerated news.

Some specific sources identified in different states included,

- Andhra Pradesh: volunteers of the local volunteer network
- Madhya Pradesh: local community leaders such as in [Jhabua \(MP\)](#), majority of the participants among tribal groups mentioned *Tadvi*, the local name for the leader among the tribal community, as the most reliable source.
- Odisha: Mike announcements as it helps in reaching out to people who are illiterate or don't have access to other information sources.
- Rajasthan: social media like WhatsApp, Facebook, YouTube and *Aarogya setu* app. A few mentioned local NGOs such as Om Shanti Sansthan.

For health warriors, TV, Newspapers, WhatsApp, Facebook, YouTube, caller tune (Amitabh Bachchan's message), and fellow health warriors were some of the common sources of information in all the study states. Apart from these, local NGOs and intra-departmental communication (AP and Odisha) were identified as reliable sources mentioned.

2.3 Perceived level of threat from COVID-19

The perceived threat from COVID-19 varied from state to state as well as in rural and urban locations.

For instance, in Indore (MP), Odisha and to some extent in Rajasthan, the level of threat from COVID-19 was perceived as 'high' or 'medium'. However, the majority of the participants in AP, Bihar, and Jhabua (MP) felt that threat from COVID-19 is 'low' in their communities.

"Khatra jyada hai kyuki log savdhani nahi rakhte, laparvahi baratte hai, social distancing nahi rakhte"

(Threat is high because people do not take precautions, are negligent and do not maintain social distancing)

-Triad, Female, 40+ years, Urban, Rajasthan

Some participants cited some examples where members of their community weren't practicing the suggested precautionary measures. In their views, such behavior could be a source of spread and reason to consider COVID-19 as a threat.

Reasons identified for the high level of threat included

- Mobility of labour from nearby areas to city for work (MP).
- Not following COVID-19 prevention guidelines at public places (MP, Rajasthan)
- Non-availability of beds in the hospitals for treatment created panic among people
- Loss of livelihood opportunities (Odisha, Bihar)
- Adverse impact on overall health (Odisha)

Fear is intense, there is no medicine. Doctors don't provide proper treatment to patients who come for treatment of other diseases. Family members are not allowed in COVID centres. And those who come for treatment of other diseases, first have to get their COVID test done.

IDI, Male 30-50 years, Urban, Odisha

The TV news channels not only informed and updated people about the risks and impact of the coronavirus but also influenced their perception of risk from COVID-19. For instance, visuals and updates on containment zones or people moving out despite restrictions on movement during the lockdown, alerted them as well as created fear and panic, to some extent, of the situation worsening further.

Distance maintained by the doctors during health check-ups of patients with other ailments was an unusual sight and made people realise the high risk from coronavirus.

On the other hand, in states like AP, Bihar and one of the study districts, Jhabua (MP) perceived level of threat from coronavirus was low, for reasons like,

- Lesser number of COVID-19 infected cases, hence no real threat in their community.
- Believed to have strong immunity, as they are hardworking.
- Keeping the surroundings clean and use natural

Currently, Level of threat is very low as compared to the month of March and May. Cases has been the lowest in December. But threat is still there as virus still exists and people are moving without fear and not wearing any mask.

-Triad, Male, 18-25 years, Rural, AP

remedies as preventive measures.

- Intake of liquor made up of *Mahua* and *Kadakhath*- a breed of chicken, with high nutritive value, adds to the immunity of the community members and safeguards them from getting infected from COVID-19.

Non-practice of precautionary measures was seen more in youth groups as compared to other members in the community, as well as among populations in rural locations, in general.

Whatever danger was here being due to the young people. They do not listen to anyone. This district come into red zone because of several cases. People of all ages were afraid...

-KII, General physician, Urban, Odisha

According to some health warriors, particularly, in Odisha and Rajasthan, the perceived level of threat, people had initially in their area, has come down. Primarily due to:

- A decline in COVID-19 positive cases in the area
- The positive discourse around upcoming vaccine

Interestingly, the **difference in the level of threat perceptions between rural and urban areas was shared by health warriors from MP**. The key reasons identified include,

- **Human to human contact is more in urban areas** because of high population density unlike in rural areas
- Due to **more COVID tests being conducted** in urban areas
- Also in urban areas, **people who tested COVID +ve did not reveal about their positive status and roamed around in public places that** resulted in more COVID positive cases in the

"Humare shetr mai corona ka star kam hai kyunki hum Adivasi log hai. Humare ghar – ghar mai log mahua ki sharab peete hai. Acha khate hai."

(The threat from corona is low in our area because we are Adivasis. In each Adivasi house, they drink Mahua, eat good food)

-Triad, Male, 40+, Rural, MP

"Pehle bahut darr tha, ki bimari ek se doosre ko failti hai. dawai koi nahi hai. Abhi darr kum lag raha hai kyunki tv mai batate hai ki dare nahi, savdhani rakhe. Bimari ka teeka aane wala hai. Isliye daar kam hai"

(Earlier there was lot of fear that disease spreads from one to another. No medicines available. Right now fear seems less because in TV it is said that don't be afraid and take care. Vaccine is about to come, so fear is less)

-KII, ASHA, Rural, Odisha

community.

Health warriors from AP and Bihar shared that perception in the community about the low level of threat from the corona is also because people are having a regular intake of natural remedies which they felt will boost their immunity along with practicing COVID-19 appropriate behaviours.

From March to August month, the level of threat was high, but now it is less because members are maintaining all precautions such as using masks, maintaining social distancing etc. Even if it is normal cold, we are telling them to drink hot water with turmeric, ginger, washing hands and not sitting in groups

-KII, ASHA, Rural, AP

However, as per CMS teams' observation supported by health warriors' opinion as well, across states, people are day by day becoming negligent and careless to follow COVID-19 related precautions and protocols though in varying degrees.

"Khatre ka estar zyada tha kyunki logo ne jinko corona hua tha unhone chupaya tha. COVID ke wajah se ek buzurg ki mrityu hui thi. Unke gharwalo ne unke corona positive hone ki baat ko chupaya tha. Unki shav yatra mai lagbhag 500 log gaye the. Is wajah se waha gaye hue bahut sare log corona positive ho gaye the"

(Danger level was high because people who had corona, hide it. An old person died due to COVID. His family had hidden the fact that he was corona positive. Around 500 people attended the funeral ceremony that led to infect many people presented in the funeral.)

-KII, ASHA, Urban, MP



Triad with a female group

CHAPTER 3: COVID-19 VACCINE EAGERNESS and HESITATION

The chapter discusses in detail the prevailing perception about the COVID-19 vaccine, which was yet to be administered among health warriors as well as community members. Different components concerning vaccine acceptance, trust, and confidence, eagerness to get vaccinated, as well as hesitancy towards the COVID-19 vaccine are covered in the chapter.

3.1 ACCEPTANCE OF COVID-19 VACCINE

The discourse around the COVID-19 vaccine among community members is revolving around its quality and effectiveness. Vaccine acceptance was captured by enquiring about confidence and trust in the vaccine being developed, and also in the process and agencies involved; and also regarding their perception about effectiveness or efficacy of the vaccine. It is pertinent to mention that the study was conducted before vaccination drive started in India and only information available through different formal and informal sources were the means to form any opinion about the vaccine against COVID-19 pandemic.

Corona vaccine government ki dekh reh me bana hai. Clinical trial ke baad hi Sarkar isse manjoori degi. Test me khara utarne par hi vaccine di jaye gi..

(Corona vaccine has been made under the supervision of the government. Government will approve it only after clinical trials. The vaccine will be given only if it passes certain tests and standards.)

-Triad, Male, 40+ years, Urban, Rajasthan

High confidence and trust

The extent of trust and confidence was largely high among participants. Most of the community participants during discussions, irrespective of age, gender, and SEC across states opined **high confidence in vaccine's effectiveness**.

Reasons attributed for the high degree of confidence and trust include,

- Involvement of the government at the highest level, Prime Minister himself supervising the progress of clinical trials.
- Clinical trials are being conducted not only in India but across several countries to establish the safety and efficacy
- Government will make the vaccine available for use only when it has passed all the tests and standards.

It is told on TV that there is a vaccine that is going to come after getting tested. Fear will end. We will celebrate all the festivals together as before. Income sources will open up...

-IDI, Male, 30-50 years, Urban, Odisha

People have **high expectations from the COVID-19 vaccine** and are eagerly looking forward to the vaccine to be effective. As different participants opined:

- To **get back to their normal lives** once vaccinated
- To **safeguard the community from the fear** of infectious disease and move around
- **No medicines are available** for the treatment, so a vaccine can be only alternative
- Availability of **vaccine at government hospitals** will ensure the genuineness of vaccine

Few were non-committed and want to see the effect of the vaccine on health warriors before taking it.

The confidence and trust in the effectiveness of the COVID-19 vaccine was overwhelming among health warriors.

- Only one physician was apprehensive of the vaccine's effectiveness, as he felt that the expedited clinical trials of the COVID-19 vaccine were conducted.

Low confidence and lack of trust

- Only a few, however across all states, had **apprehensions about the vaccine's effectiveness** due to lack of information available in the public domain on **side effects of the vaccine** or because they felt that the vaccine is coming in a very **short period** and has **not been tested on all age groups**.
- **Low trust in the vaccine's effectiveness** was also influenced by **misinformation and negative messages** circulating through different mediums, such as *people die after 3 months of COVID vaccination, or clinical trials being conducted in a haste*.

"Samuday mai dosre gaon se vaccine ke lie afvah ay ithi ki jo ye vaccine lagvaega veh 3 mahine bad mar jaega. Kuch mahilae dar ke apne baccho ko Anganwadi bhi nahi bhejti kyunki kahi koi teeka na lalga de"

(Rumours were heard from other villages that anyone who takes the vaccine will die after three months. Few women don't even send their children to anganwadi out of fear that their children will get vaccinated at the centre.)

-Triad, Female, 40+ years, Rural, MP

To **improve confidence and trust** level in the community on COVID-19, participants suggested

- **Messages on safety** to be shared by those who have already taken the vaccine
- **Vaccination of prominent personalities**
- **Information on the success rate** of vaccine

This vaccine may not turn out to be completely effective in preventing COVID because now we are hearing about new strain of the virus. We don't know if this vaccine will work or not

-Triad, Male, 26-40 years, Urban, AP

In addition, in one of the male groups in urban Andhra Pradesh, **showed concern about the effectiveness of the vaccine on a new strain** of the COVID-19 virus was raised.

As the news related to new strain came up only a few days before the data collection for this study (December 2020), most of the participants weren't aware of it. However, it might be possible that in course of time people will start getting information about the new strain and would like to discuss it.

Hence this aspect should be included in future communication messages to further improve trust and confidence in the vaccine's effectiveness.

3.2 PREFERENCE FOR NATURAL CURE VS. COVID-19 VACCINE

Natural methods of enhancing immunity against COVID-19 was widely disseminated and accepted by the community members since the early period of the emergence of the COVID-19 pandemic. Among key reasons for the preference was:

- Absence of any definite cure/medication/vaccine against COVID-19
- Easy availability of ingredients of natural cure at the household level/in surroundings such as *kadha* (a mix of natural herbs), vitamin C rich foods, green vegetables, and fruits, among others

However, preference for the COVID-19 vaccine over natural remedies was overwhelming, except to some extent in tribal communities of MP and Odisha.

Reasons for preference across states and demographic parameters were

- **Natural remedies are only supportive and not a potential cure necessary to eliminate COVID-19.**
- However, some participants opined that the use of **natural remedies may continue** even after taking the COVID-19 vaccine only **to ensure protection not just against COVID-19 but for other diseases too.**

“Sabhi vaccine lege kyuki sabhi ke man me corona ka daar hai jisse nikalne ke liye vaccine lege. Gharelu upchar to sabhi kar rahe hai lekin permanent solution to vaccine hi hai”

(Everyone will take vaccine because there is fear of corona and vaccine is important. Everyone is using natural methods but vaccine is the only permanent solution)

–Triad, Female, 26-40 years, Urban, Rajasthan

“Eis samuday may zyadatar log praktik aushadhiya jaise hari sabzi, gharelu nuske par zyada vishwas karte hai kyunki yaha log kam padhe likhe hai. Zyadatar log yahi istemal karenge. Par hum poora parivar vaccine lagvaenge kyunki isi se corona khatam hoga”

(Here majority of the people believe in natural remedies like medicinal plants, eat green vegetables and homemade remedies. Most of them use these remedies but my whole family will take the vaccine because this is only way to end Corona)

Triad, a male participant, 40+ years, Urban, MP

Health warriors were also confident that people understand the importance of the vaccine, even though some may continue with natural remedies post-vaccination as well.

- Even during the pre-COVID-19 time, **some community members were using natural remedies** and will continue to do so.

However, a frontline health worker from MP was forthcoming to flag off some concerns at the community level related to

- Possible side effects of COVID-19 Vaccine; or/and
- Lack of faith in health care facilities

“Humare samuday mai zyadatar log prakritik tareke se upchar karna pasand karenge kyunki unko Sarkar aur hospital pe bharosa nahi hai. Unhe lag rah hai ki is upchar se hume maar denge”

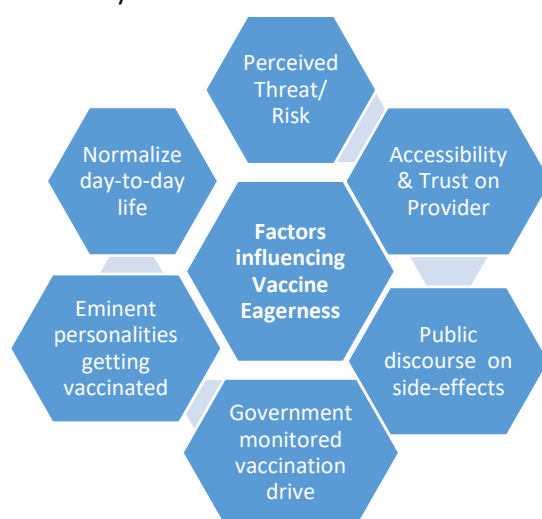
(Most people in our community would prefer natural treatment because they don't trust the government and hospital. They feel that the treatment they get is intended to kill them)

-Triad, Male (40+) Urban, MP

3.3 VACCINE EAGERNESS

This section discusses the eagerness of the community to get vaccinated when available; it also focuses on the scenario when there are hardly any positive cases around and people prioritise in paying for vaccination than spending on their needs. Vaccine eagerness was captured by enquiring about the upcoming scenario of vaccine availability, and how eager the participants and the community members would be to go for vaccination immediately (at the first given opportunity), or who will wait, and why will they do so.

Most of the participants showed **eagerness to get vaccinated, as soon as made available** and feel the same among the community members as well.



Who should go first: However, given the limited availability of vaccine, participants identified different sections/groups in the community, who should go first for vaccination and include,

- senior citizens
- people with co-morbidities
- corona infected people & their families
- working population especially labourers, salesman, restaurants staff, among others.

“Naujawano ki immunity achi hoti hai. Housewife aur bache kum hi bahar nikalte hai. Isliye veh intzar kar sakte hai”

(Young people have strong immunity, and because housewives and children also don't go out., they can wait.)

- IDI, Female, 30-50 years, Urban, Rajasthan

Reasons cited:

- poor immunity
- go out for work and are more exposed to risk

Who should/will wait:

- **Youth and children**, identified by youth as well as other age group participants
 - Why: have better immunity
- **Women**
 - Why: have minimal exposure as rarely go out to public places and can avoid crowded places
- **Rural population, as identified in Bihar, MP and Rajasthan**
 - Why: some participants and a few health warriors in Bihar and Rajasthan felt that number of cases are very few in rural areas as compared to urban and
 -
 - among the rich section of the society, mostly from urban locations
- People who lack trust in vaccines and have fear of side effects will wait, as identified in Rajasthan and MP.
- People who are not able to pay for the vaccine will wait
- **People who think that as they haven't contracted the virus yet, a vaccine may not be essential.**

“Goan ke log bilkul bhi utsuk nahi hai vaccine ko leke kyuki unhe lagta hai ki goan me bimari nahi hai kyuki ye log dhoop me parishram karte hai. Unke anusaar, ye to bade logo ki bimari hai jo AC me rahete hai”

(Rural people are not at all keen for the vaccine because they think that villages do not have this disease. Here people do hard work in sun light. According to them, this disease is for rich people who lives in AC)

-KII, ANM, Bihar

Health warriors felt that people residing in urban areas are more eager to take the vaccine because their perceived level of threat is high as compared to rural areas.

“jin logo ko vaccine par vishvash nahi hai wo log baad me vaccine lagwayenge”

(people who do not trust vaccine, will take vaccine later)

-Triad, Female, 26-40 years, Rajasthan

The willingness to get vaccinated, as confided by a few health warriors and community members, is also **influenced by the political developments of the recent past and citizens' liking/disliking of the national/state governments' policies and decisions**, even those not related to COVID-19 pandemic.

Community members, more among male youth groups and in particular from the Muslim community were skeptical about the effectiveness of the COVID-19 vaccine. A few from the Muslim community see it as a conspiracy against their community.

“Muslims mein vaccine ke prati bharosa ki kami hai. Yeh Muslims ko khatam Karne ki sazish mante hai. Yeh dekhenge faede nuksan”

(There is lack of trust among some in the Muslim community. They see it as a conspiracy to eliminate Muslim population. They will wait to see the benefits and side effects)

-IDI, Female, 30-50 years, Urban, MP

Willingness to vaccinate in case of no COVID positive cases in the family and neighbourhood

-
- For most of the participants, across the states, no COVID positive cases in the family and the neighbourhood wasn't a major criterion to delay getting a vaccination
- **Ready to take a day's off and even lose a day's wage**, to get vaccinated

Reason:

- to allay the fear of the disease and further strengthen immunity; or
- go freely for work, particularly among the rural population

Particularly from the poor community members' perspective, some participants across all five study states felt that the **price of vaccine would influence the willingness to vaccinate against COVID-19**. Based on experience, some participants shared that **few community people may wait for the price of the vaccine to get low or till it is made available free of cost**.

Vaccine vs Other needs

In possible scenarios where financial resources are limited and a choice between spending on the vaccine and other important needs (such as child's school fees, house repair, purchase new mobile phones, spend on agricultural inputs, or attend a marriage in a close family outside the district) in the family has to be made, most of the participants across the states, locations and age group felt that **even people with limited resources will give preference to vaccine over other needs**.

At the same time, may sound encouragingly from another perspective, **paying school fees of their children before paying to get vaccinated against COVID-19** emerged in some groups, however only for those who have children in private schools.

Besides, **some participants in AP gave preference to spend on agriculture inputs and house repairing than vaccination**.

- **Reason: The source of food and income for the family**

However, in all such possible scenarios, the bottom line was the price of the COVID-19 vaccine, that will influence the decision making to spend on a vaccine or other needs of the family.

Preferred place to get vaccinated: Acceptance and eagerness to get vaccinated is, to a great extent, also influenced by the place of vaccination. The majority across states reported preferring **government facilities**.

Reasons cited for preference were

- **Spacious and easily accessible**, such as sub-centres, PHCs/CHCs, district hospitals, or even at Anganwadi centre or govt. school premises, for the local population, as well as for old/senior citizens and differently-abled
- **Reliability** on vaccine's genuineness and quality, if provided at government facilities
- **No bias in services**
- **Free of cost** or only a nominal amount charged as a registration fee

If COVID vaccine is not given at Anganwadi centre or club, then it would be difficult to take old and differently abled people. Due to lack of resource for everyone... it will be difficult to afford travel expenses of each family member.

-Triad, Female, 26-40 years, Rural, Odisha

Trust in vaccine providers was identified as another important factor to influence vaccine acceptance by the community members. As for the COVID-19 vaccine, the community is confident that it will be provided at the

health facilities closely monitored and under the direct

supervision of the government. Moreover, the community members also believe, the government service provider will keep a **check over fake vaccines** and **not discriminate between the rich and poor.**

In case of any adverse effect after vaccination at government centre, free treatment will be provided while in private we have pay the cost

-Triad, Female, 18-25 years, Rural, AP

People also trust government facilities and providers because of the existing government-run immunization drive for children, in particular. These immunization programmes (Mission *Indradhanush*), like many other public health services of the government, are generally

provided free of cost, therefore participants perceived that in this case too (COVID-19 vaccination), the **government will provide the facilities free of cost and bear the full responsibility of the well-being of the people if anything goes wrong.**

"Private mai tikka duplicate hone ka khatra raheta hai"

(There is a risk of getting duplicate vaccine in private hospitals)

-Triad, Male, 18-25 years, Rural, Odisha

However, a few participants, mostly in urban locations showed their preference for the **private providers/facilities because they are clean, properly managed, and less crowded than government hospitals.**

Some mentioned that if a vaccine is provided at the same cost at both government and private health centres then **preference will be for nearby centre irrespective of government or private.**

3.4 WILLINGNESS TO PAY FOR COVID VACCINE

Particularly for the poor, in rural or urban locations, across states, the majority want the **COVID-19 vaccine to be made available free of cost, or at a nominal fee.**

Reasons cited included

- Family size
- People lost jobs or fewer job opportunities available, even post-lockdown.

“Vaccine ki kimat dene ke liye kum hi log ichuk hai kyuki lockdown me waise hi arthik istithi kharab ho gai hai”

(very few people are interested in paying money for vaccines because their financial condition is poor because of lockdown)

-Triad, Female, 18-25 years, Urban, Bihar

Health warriors too were of a similar opinion when enquired about the community’s preference, as one of the health warriors in Rajasthan mentioned that *people are careless towards their health, so they won’t pay for the vaccine.*

Preferred price (if priced): The price range quoted was as low as **Rs 05/- and up to Rs 500/-.**

State-wise preferred price range (in INR) was:

- *Andhra Pradesh: 100-500*
- *Bihar: 50-200*
- *Madhya Pradesh: 05-200*
- *Odisha: 20-200*
- *Rajasthan: 10-500*

“Jo APL parivar hain unse vaccine ka paisa liya jaye aur BPL parivaro ko muft mein vaccine di jaaye”

(Vaccine cost should be charged from APL families while BPL families should get this vaccine free)

-IDI, Female, 35 yrs., Urban, Rajasthan

Health warriors too had a similar opinion on the price range, if priced, for the COVID-19 vaccine:

- *Andhra Pradesh: 50-500*
- *Bihar: 10-300*
- *Madhya Pradesh: 10-200*
- *Odisha: 10-1000*
- *Rajasthan: 10-500*

“Ek saal se logon ka kaam dhandha Corona ke karan bandh pada hai. Log gareeb hain... yadi vaccine ke liye paise dene pade to 30% log vaccine lagwayein gay aur 70% nahi lagwayein gay...”

(Since last one year, earning has stopped due to Corona... people are poor... if they have to pay for the vaccine, then 30% will go for the vaccination while remaining 70% will not go)

-IDI, ASHA, Rural, Odisha

On an alternative scenario, wherein some section of the society had to pay and rest do not have to, the **health warriors, across states, identified economically poor people and families; BPL households,** as per existing government criteria, were mentioned to **get COVID-19 vaccine free of cost.**

3.5 PRIORITY GROUPS FOR VACCINATION as perceived by Community and Health Warriors

Community members agreed with the priority group i.e. **health warriors identified by the government to get vaccinated first against COVID-19**, before making the vaccine available for the general public.

- Reason: They come in close contact with infected people and are at high risk.

Other groups high on the priority list include **senior citizens, people with co-morbidities, sick people**, as identified by the government as well.

Earning members in the family, who go outside to earn or **migrant workers** were also put in the priority group for vaccination in states like AP, Odisha and Rajasthan.

Also, police, defence personnel, bank officials, teachers, and sanitation workers were identified as priority group(s) for vaccination against COVID-19.

Low in the priority list for vaccination were

- rich and politicians (in Rajasthan) or
- youth (in other states/ some groups)
- women were also specifically mentioned but in a few groups.

However, in AP, in one of the male triads (40+ yrs.) participants opined that **women should be given vaccine on priority because they take care of the family**.

Working members of the family should be vaccinated on priority because if they are infected with corona, earning will stop. Health workers should also be vaccinated on priority because they deal with many patients daily. People with diabetes and high BP should be given priority because they can easily get infected with corona...

-Triad, Female, 26-40 years, Rural, AP

"Ameer our netaon ko vaccine baad mein lagna chahiye kyunki agar woh bimar pad gaye to aasani se apna elaaaj karva sakte hain"

(Rich and politicians should be vaccinated in the end because in case they get sick they can afford the treatment.)

-Triad, Male, 40+ years, Rajasthan

Health warriors welcomed to be put at top in the priority list for COVID-19 vaccine by the government as they too felt the risk carried by health warriors is more as their contact with probable COVID-19 infected people will remain high.

Health warriors, also agreed for **senior citizens and people with co-morbidities or other diseases** to be kept high on the priority list for vaccination as they too have higher chances of getting an infection due to low immunity, and also their recovery rate is slow.

Some other identified groups for vaccination on a priority basis included, **families with COVID patients, government officials engaged in COVID control activities or public dealing officials (like police officers), beggars etc.**

"Jiske pas pehle se bimari hai unko zyada khatra hai. Ese corona ke case desh mai zyada aye hai. Isilie inko pehle teeka diya jana chahie"

(people who are already infected have higher chances of getting infection. This is one of the reasons of high corona cases in our country. So they should be vaccinated early)

-IDI, ASHA, Rural, Odisha

In states like Bihar, Rajasthan and Odisha, **poor people/financially weak families, BPL families** were identified as a priority group for vaccination. Few other suggested groups for being put on priority for vaccination were **new-born children, army, police officers, local volunteers, municipality workers, sanitation workers.**

Vaccine for infants and children

Mixed responses emerged from health warriors.

In AP, some health warriors mentioned that **infants get enough breastmilk to boost their immunity so they do not need any vaccination.**

On the other hand, a health warrior in MP had a divergent view and believed that **immunity of infants and children are low so they should be given vaccine on priority.**

“Agar maa corona positive hai to bache ko tikka lagana chahiye anyetha nahi lagana chahiye kyuki bache ki immunity baki logo se achi hoti hai”

(If mother is corona positive then child should be given vaccine otherwise vaccine is not required because their immunity is already strong than others)

-IDI, Private Physician, Urban, Rajasthan

Similarly, in Odisha, health warriors were **not in support of administering the vaccine to children or infants because no research has been done on the effectiveness of the corona vaccine on children.**

In Rajasthan, some health warriors suggested including **the COVID-19 vaccine in the routine immunization program of children,** to protect infants and children from the virus in the future.

3.6 VACCINE HESITANCY (VH)

The success of vaccination drive against COVID-19 depends largely on voluntary acceptance of vaccines at the community level. However, like any other newly introduced medicine or vaccine, the possibility of hesitancy among community members and even health warriors, even though in varying degrees is expected. To understand VH among individuals and at community level, the study captured participants views on aspects like confidence on vaccine and vaccine providers; and/or the prevailing complacency among participants and community members, as they do not perceive a need for a vaccine, or may hesitate to go for vaccination if it is inconvenient due to factors like access of vaccination centre and affordability of vaccine

Study participants were not forthcoming in disclosing the self-hesitation for vaccination, however, most of them shared their views and opinion on hesitancy from the community perspective. No distinct hesitation for the COVID-19 vaccine was observed by any of the participants' profile criteria like locations, gender, age group, or SEC.

- **It was expected that there will be initial hesitation among community members when the vaccination drive starts.**

Reason for Hesitation

- **Perceived fear of side effects** was reported by most. As the vaccination drive among the general public is yet to start, high likelihood of community members keeping a close watch on reports related to the side/adverse effect of the vaccine on people, who went for it. In the case of COVID-19, **vaccination drive among health warriors is expected to be observed with great curiosity and expectation.**

Samuday ke log dushprabhavo ko leke sankoch kar rahe hain kyuki logon ne news may dekha hai ki Russia may Putin ki beti ko vaccine ka side effect hua hai, isliye logon ke man me daar hai aur vishwash kum hai.
(community members are hesitant due to side effects of vaccine. People have fear and do not have faith in vaccine because they have seen in news that daughter of Putin in Russia had side effect of vaccine.)

-Triad, Female, 18-25 yrs., Urban, Bihar

- Discussion around **vaccine's quality and effectiveness, as it is developed in hurry** i.e. within a year since the emergence of COVID-19, is adding up to VH, right from national up to village levels.
- Some participants, particularly from SEC A/B, were **apprehensive about the vaccine development process** because they believe that generally, it takes at least 3-5 years.

"Swasthya karmiyo ko bhi side effect ka daar lag raha hai. Lena nahi chaha rahe hai. Hichkichahat hai kyuki hospital me apas me side effect aur afwaho ke baare me charcha karte hai"

(Health workers also have fear of side effects. They are reluctant to take vaccine. There is hesitation among them as they discuss about side effects and rumours in the hospital)

-IDI. General Phvsician. Urban. Raiasthan

Some degree of hesitation due to likely side effects was also expressed by 1-2 health warriors across states.

- **The price of the vaccine** is another reason cited for hesitation. Participants felt that a **significant proportion of the population, particularly in rural areas and among urban poor may not go for vaccination if the vaccine is priced.**

In case of vaccination centre being far away from their home, some people may not go because of travel expenses. Even handicapped people will also not be able to go

-IDI, ASHA, Rural, Odisha

- **The place of vaccination** is another constraint reported, especially in rural areas. People would like to get a vaccination in nearby locations like Anganwadi centre, village school, panchayat bhavan, government health centre, among others. People **don't want to spend on commuting to & fro the vaccination centre**; more so, if all family members had to travel.

- **Rumours/misinformation about the COVID-19 vaccine, even though shared only by a few participants**, is another reason for hesitation. Various rumours were reported by participants such as

- pig fat being used in vaccine preparation (Bihar/Raj.); or
- vaccine affects fertility (MP/Raj); or
- those vaccinated will die within three months after vaccination (MP)
- even post-vaccination people are getting infected from COVID-19 (Rajasthan)

"Muslim samuday ke logo ka kehna hai ki Sarkar muslim logo ko marne ka plan kar rahi hia. Unka kehna hai ki ye vaccine humare bharosa ka nahi hai, jansankhya kam karne ka plan hai sarka"

(People of Muslim community says that government is planning to kill Muslim people. According to them vaccine is for reducing the population so we do not trust them.)

-IDI, ASHA, MP

"Vaccine ke baare me afvahe jyada hai. Haryana ke health minister ko laga tha to wo corona positive ho gaye. England me vaccine lagwane par HIV ho gaya. Afvah ki wajah se logo me hichkichahat hai"

(There are many rumours about vaccines. Health minister of Haryana become corona positive after vaccination. People become HIV positive after vaccination in England. People are hesitant due to such rumours.)

-IDI, Private Physician, Rajasthan

- **The pre-conceived notion of immunity**, such as those who consume alcohol or eat non-vegetarian foods, may not get infected, particularly among the tribal population in MP and Odisha.

"jo log nasha karte hai unka manna hai ki unko corona nahi hoga. Sath hi jo log gharelu upchar ya prakratic jadi butiyo ka upyog kar rahe hai unko is vaccine par vishwas nahi hai"

(Those who take alcohol believe that they will not get infected with corona. Also people who are using home remedies or natural cure do not believe in this vaccine)

-Triad, Female, 26-40 years, Rural, Rajasthan

- **Intake of herbs/medicinal plants and natural remedies** enhances immunity.

- **Low cases/no deaths in the community** was also a reason for some community members delaying the vaccination for a while till satisfied with the vaccine's efficacy

"Humare samuday mai zyadatar log prakritik tareeke se upchar karna pasand karenge kyunki unko Sarkar aur hospital mai kiye jane wale upchar par bharosa nahi hai"

(In our community majority of people would like to get treatment through natural methods because they do not believe in the treatment provided by government or hospitals)

-ASHA, Urban, Indore, MP

Health warriors too cited similar reasons behind hesitation in the community, as observed during their interaction with the community members.

- Besides, lack of trust in government facilities, waiting time, and poor services/treatment provided at the health facility, were also identified, by a few health warriors.

3.7 INFORMATION NEEDED TO ADDRESS VACCINE HESITANCY AND MOTIVATE COMMUNITY

To overcome vaccine hesitancy and motivate community members, some suggested messages were sought from the community members and health warriors.

- Create a positive narrative about the COVID-19 vaccine** that gives accurate information about the vaccine, highlights its benefits and addresses myths related to the vaccine, and queries around its side effects. Messages should include
 - Safety aspect of vaccine, specifically for senior citizens and people with co-morbidity** (Rajasthan and AP)
 - Risks from COVID-19 and importance of Vaccine and its benefits** (MP, Odisha and Bihar).
 - Effectiveness of vaccine, a success rate of vaccine; the dose of vaccine; low price of vaccine; evidence of no side effects** (AP).
 - Success stories of earlier vaccination drive like Polio etc, be highlighted** (AP, Odisha, Rajasthan)
- Messages shared through trusted sources** will be very critical to motivate the general public to go for vaccination when their turn comes.
- Regular interaction between district administration and community representatives to raise confidence and trust** by giving assurance from the government to compensate family in case of any mishap or issue post-vaccination will persuade people for the uptake of the vaccine. (MP)
- Health warriors across study states too opined on the importance of sharing information

“Vaccine se agar halka fulka bukhar aata hai to darna nahi hai. Wo 1-2 dino me thik ho jaiga”

(If there is mild fever, do not be afraid. It will be cured in 1-2 days)

-IDI, Male, 26-40 years, Urban, Rajasthan

Clearly mention in messages about the dosage of vaccine, when should it be taken. Show proof of no side effects, evidences of trial should be shared with people. Tell about side effects from vaccine

-Triad, Male, 26-40 years, Urban, AP

Don't be afraid, polio was eradicated because of its vaccine. Likewise, corona will be eradicated if we get vaccinated...

-Triad, Female, 18-25 years, Urban, Odisha

“People will take vaccine if officials from health department or doctors says that there are no side effects. Like politicians come and ask for votes. Likewise, they should come and say that they have taken the vaccine and there is no problem.”

-Triad, Female, 26-40 years, Urban, AP

“Basti ki har gali se 2-4 logo ko bula kar ke collector ya nagar nigam aur police ke adhikariyo dwara baithak ki jae aur us baithak mai unhe ashvasan diya jae ki is vaccine se agar apko kuch hota hai to Sarkar ke dwara apke parivar ko muavza diya jaega”

(Two to four people from each street of the basti should be called to attend a meeting by collector or officials of municipal corporation. In the meeting they should be assured that if anything happens to you, your family will be compensated by the government.)

-Triad, Male, 40+ years, Urban, MP

regarding vaccine and their benefits, for raising community's confidence.

- Messages should include **vaccine storage and handling** (cold chain) and the health team's capacity building to manage case(s) of any **AEFI (adverse event following immunization)**.

3.8 PREFERRED SOURCE FOR INFORMATION ON COVID-19 VACCINE

The vaccination drive for the general public is around the corner, not only messages but the source of information, as listed by the study participants, across the states and demographic profile, will play a significant role in motivating people to come forward and get vaccinated.

As for the COVID-19 related information (discussed in the previous chapter), for its **Vaccine related information** too, the preferred sources at the **community level** are

- **Frontline health workers** (ANMs, ASHAs and AWWs) –mainly in rural areas
 - *Reasons cited:* Easily available and approachable; from own community; trustworthy, as are responsible for implementing other government programmes including immunization drive

“Anganwadi isi shetr ki hoti hai. Hum logo ko galat jankari nahi de sakti hai kyunki use swasthya kendra se bataya jata hai. Isilie abse zyada bharosa anganwadi pe karte hai.”

(Anganwadi worker is from our own area. She can't give wrong information because they are informed by health centres. So we trust them the most.)

-Triad. Male. 26-40. Urban. MP
- **TV and Newspaper**-mainly in urban locations across SECs (all states)
 - *Reasons cited:* updated and reliable news; health experts and professionals share views and opinions; in the local language. Preference for Doordarshan news (in Rajasthan) or Eenadu and Sakshi newspapers and TV9, ETV for TV news (in AP).

“Anganwadi worker aur ASHA par bharosa hai kyuki wo har cheez ka labh deti hai. Pregnant ko jankari deti hai, vajan leti hai aadi”.

(We trust ASHA because they provide all benefits. Provide information to pregnant women, take weight etc.)

-Triad, Male, 40+, Rural, Bihar
- **Local leaders** such as Sarpanch, PRI/Ward members (Bihar, MP, Odisha and Rajasthan).
 - *Tadvi, the local name for a leader in the tribal community (MP); local volunteers (AP)*
 - *Reasons cited: local leaders are always in touch with people and the community believes that they will give reliable and correct information.*

“Tadvi adivasio ka mukhiya hota hai. Vo hum logo ko sahi rasta dikhata hai. Isilie hum tadvi par zyada bharosa karte hai”

(Tadvi is leader of Adivasi community. He shows us correct path. So, we trust Tadvi the most.)

-Triad, Female, 18-25, Rural, MP
- **Mike announcements** preferred in Rajasthan, Odisha and Bihar) because it is **effective in reaching out to illiterate populations**.
- **Other preferred sources, based on easy to access** were posters, wall paintings, mobile phones apps such as *Facebook, WhatsApp, caller tunes, YouTube*

For **health warriors**, the **preferred sources**, across states were

- *Health department seniors and supervisors*
- *Health facility In-charge*
- *TV and newspaper*

- *mobile and social media*
- *Medical journals and Health department meetings (Rajasthan)*
- *Online videos (a few in MP)*
- *Webinar and information provided by ICMR and WHO (AP)*
- *Technical guidelines and advisory, seminars, trial reports, PM's speech (Odisha)*

3.9 COVID APPROPRIATE BEHAVIOUR POST-VACCINATION

At first instance, most of the participants felt that **COVID-Appropriate Behaviour (CAB)** i.e. wearing masks, maintaining social distancing and washing hands frequently **should be followed even after getting vaccinated**.

However, when probed further there were mixed responses about current practices related to CAB among study participants as well as community members.

In districts and locations, which reported a higher number of COVID-19 positive cases, CAB was found to be in practice to some extent only. While in states like AP, Bihar and more particularly in rural locations of almost all states, CAB was found wanting.

While some, particularly in urban locations of AP and Odisha, were in favour of continued CAB, as the number of cases reported were still high and also news related to a new strain of COVID-19 was reported though the vaccine's effectiveness on the new strain is yet to be checked.

Yes, we will definitely follow this behaviour after vaccination because new virus has arrived so it is good to continue those safety measures

-Triad, Male, 26-40, Urban, AP

However, as observed, *enforcement of CAB in public places, in almost all locations, except Jaipur urban (Rajasthan), was not in place and or ensuring the practice of suggested protocols for preventing the spread of COVID-19.*

"Yaha to mask log abhi hi nahi lagate hai. To vaccine lagne ke bad waise bhi nahi lagaenge kyunki phir corona ka dar nahi rahega"

(Even now, people are not using masks, so they won't use masks after vaccination because fear of corona won't be there.)

-Triad, Male, 26-40, Rural, MP

On the other hand, in **Bihar and MP (Jhabua, in particular)**, the current practice related to CAB among community members was observed to be missing. **Youth members, across states, were observed, in particular, not practicing CAB at the time of the study** hence not expected to do so in the future, as well.

Interestingly in MP, the majority of the male participants believed that post-vaccination everything will get back to normal, and following these protocols will not be required.

Health warriors had a mixed opinion on CAB among the community members.

Though health personnel admitted that **current practice concerning CAB in public places is not encouraging**, but strongly felt that **CAB should continue post-vaccination** as well.

Reinforcement of messages on CAB should continue till the entire population is vaccinated against COVID-19, which was felt by many Participants.

“Yaha ke log to bina vaccine lagaye hi mask ka istemaal nahi kar rahe hai. Bajaro me ghoom rahe hai. Vaccine lagane ke baad to unka daar poori tarah nikal jaiga”

(People here are not using masks without taking vaccine. They are roaming in markets. After taking vaccine their fear will completely disappear)

-IDI, General Physician, Urban, Bihar

Interestingly, some community members and health warriors felt that putting masks may continue to be practiced by a few as a protective measure against dust pollution, but most will not wear, as they are not doing so even now.

The **practices related to CAB will vary between urban and rural areas, as well as in different age groups and people with different educational backgrounds**, as shared by the health warriors. They elaborated,

- **Educated people or those residing in cities understand the risks of disease** and will follow appropriate behaviour
- While the majority of the people in villages believe that practicing CAB is not required as there are no COVID cases.

People in urban areas will take all precautions but in rural areas, people hardly wear masks, or maintain social distancing or practice hand washing...according to them (community members) there are no corona cases in our society.

-IDI, General Physician, Urban, Odisha



A wall painting with message on Symptoms of COVID-19

CHAPTER 4: SUMMING UP AND RECOMMENDATIONS FOR COMMUNICATION

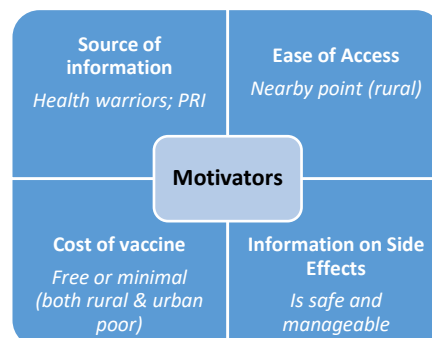
The chapter focuses on the key takeaways from the research in terms of understanding the motivating factors and barriers, which should be addressed through adapting the existing communication strategy and messages. This in turn is expected to improve trust and confidence in the COVID-19 vaccine and reduce vaccine hesitancy among the community members in the country.

4.1 MOTIVATING FACTORS

Across states and locations, as well as gender, age group and SEC, the community members were eagerly looking forward to the launch of COVID-19 vaccine.

In addition, some key motivating factors, to increase vaccine acceptance, at the community level will be

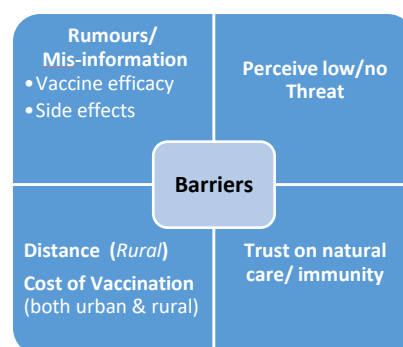
- *Information sharing* on COVID-19 vaccine related aspects through health warriors, PRIs and local leaders (**AP, MP and Odisha**)
- *No cost of the vaccine* will be a major factor, particularly for the economically poor, be in urban or rural locations (**all states, particularly rural and urban poor**).
- *The ease of reaching the vaccination centre* is an important factor, particularly for the rural population (**AP, Odisha and Rajasthan**).
- *Regular updates on AEFI, side effects, its severity and the success rate of the vaccine* will encourage people to go for vaccination, once started for the general public (**all states**).



4.2 BARRIERS

While vaccine acceptance is high among the community members, some apprehensions and hesitations too cropped up during the discussion, which should not be ignored for increasing the acceptance rate of COVID-19 vaccine. These barriers may **pose a serious challenge to the efforts** being made by the government, health experts and community as well. Some of the often emerging ones during the discussion include,

- *Rumours and incorrect/partial information* getting circulated through different social media channels and word of mouth (**Bihar, MP, Rajasthan**)
- *Distance of vaccination centre* will refrain people to willingly travel for vaccination, particularly in rural areas and among senior citizens, differently-abled as well as women and children. If commuting will require spending some amount on travel, it will further hamper the vaccination drive (**AP and Odisha (rural); Rajasthan (urban and rural both)**).



- *The self-perceived notion of low or no threat* from COVID-19 is a serious concern to be addressed emphatically. The assumption, particularly among the rural population is that no or only 1-2 cases were reported in their village, hence no need to go for vaccination, not realizing that re-emergence of COVID-19 is not ruled out yet. No complacency in CAB should be reinforced repeatedly (**AP and Bihar; tribals in MP and Odisha**).
- *Trust on natural remedies for COVID-19 is not proven*. It should be considered only as a supplementing protective measure with the COVID-19 vaccine and not as a replacement of the vaccine (**all states**).

4.3 DISCUSSION ON CONCEPTUAL FRAMEWORK AND FINDINGS OF THE STUDY

Conceptual Framework and Findings

The formative research used grounded theory methodology to answer mainly two critical aspects, namely,

- Vaccine Eagerness
- Vaccine Hesitancy

The study which was undertaken much before the vaccination drive of health warriors started in India and results of clinical trials of different vaccines against COVID-19 in India and globally were emerging, the Eagerness and Acceptance of Vaccine was likely to be influenced by multiple factors including Vaccine Hesitancy. More importantly, the COVID-19 pandemic was threatening humankind globally and not restricted to any one region of the country, the acceptance and hesitation for Vaccine by the community and even health experts and providers was on tenterhooks. It is important to note that public decision-making is driven not only by scientific or economic evidence alone, but is also driven by a mix of psychological, sociocultural, and political factors. It is crucial to take all the factors into account in order to address the issue around vaccine uptake (Larsen et. al, 2011).

Thus, the study did consider and delve into **Vaccine Eagerness** as a function of two factors

- Perceived level of threat from COVID-19
- Trust and Acceptance of Vaccine and Vaccine Providers

The study findings showed a mixed result for vaccine eagerness. While trust on process of vaccine making and providers was found to be high to accept the vaccine, when made available; the low perception about threat from COVID-19 may impact the coverage of population through vaccination drive at a desirable rate of vaccine coverage. A higher perceived severity of a disease increases the intention to receive vaccination.^{13,14,15,16} Conversely, perception of influenza as a mild disease

¹³ Gargano LM, Painter JE, Sales JM, Morfaw C, Jones LM, Murray D, et al. Seasonal and 2009 H1N1 influenza vaccine uptake, predictors of vaccination, and self-reported barriers to vaccination among secondary school teachers and staff. *Hum Vaccin* 2011;7:89–95, <http://dx.doi.org/10.4161/hv.7.1.13460>.

¹⁴ Bolton-Maggs D, Conrad D, Keenan A, Lamden K, Ghebrehewet S, Vivancos R. Perceptions of mumps and MMR vaccination among university students in England: an online survey. *Vaccine* 2012;30:5081–5, <http://dx.doi.org/10.1016/j.vaccine.2012.05.078>

¹⁵ Holm MV, Blank PR, Szucs TD. Developments in influenza vaccination coverage in England Scotland and Wales covering five consecutive seasons from 2001 to 2006. *Vaccine* 2007;25:7931–8, <http://dx.doi.org/10.1016/j.vaccine.2007.09.022>

reduced willingness to get vaccinated.⁴ Other factors associated with vaccine acceptance included the level of perceived risk and vulnerability to the infection.^{17,18 19,20} In absence of non-availability of any medicine to cure COVID-19, acceptance of vaccine as a preventive mode is high. In case of COVID-19 vaccine too, the vaccine eagerness needs to be sustained through developing communication strategy and messages which highlights the high risk and vulnerability, along with the vaccine efficacy results available through clinical trials, as well as the success rate of vaccination drive of health warriors. Misinformation spread through multiple channels could have a considerable effect on the acceptance of a COVID-19 vaccine. The frantic pace of vaccine development may play into concerns such as the lack of a long-term safety record and could compromise acceptance.²¹

As the government policy towards vaccination drive against COVID-19 suggests that the frontline health workers will be the first ones to get vaccinated, the Positive Deviance theory should be used to increase the trust and acceptance of Vaccine. The Positive Deviance (PD) approach is based on the premise that in every community there are certain individuals or groups whose uncommon behaviours and strategies enable them to find better solutions to problems than their peers, while facing worse challenges and having access to the same resources and facing similar or worse challenges.²² Vaccination drive among frontline health workers including senior and well known doctors and in the category of senior citizens, which will have many eminent persons like elected national and state leaders, industrialists, film stars and ex-sportspersons should be prominently shown to the general public through different communication mediums.

The other equally critical factor is **Vaccine hesitancy (VH)**, which is important to be assessed, analysed and addressed for ensuring the increased coverage and success of vaccination drive, in this case against COVID-19. As we understand, VH is a behavior, influenced by several factors, and the formative research assessed VH through the following parameters, which included

- Confidence on vaccine and vaccine provider
- Complacency i.e. do not perceive a need for a vaccine, do not value the vaccine), and
- Convenience in terms of access and affordability of vaccine.

This formative research brought out a subdued reaction from the community on issues related to vaccine hesitancy. Rather, it was observed that the study participants were more forthcoming to share the vaccine related concerns and hesitation from the community perspective and less from their own individual. In spite of this, overall, the confidence on vaccine against COVID-19 was by and

¹⁶ Marshall H, Toohar R, Collins J, Mensah F, Braunack-Mayer A, Street J, et al. Awareness, anxiety, compliance: community perceptions and response to the threat and reality of an influenza pandemic. *Am J Infect Control* 2012;40:270–2, <http://dx.doi.org/10.1016/j.ajic.2011.03.015>

¹⁷ Cox AD, Cox D, Cyrier R, Graham-Dotson Y, Zimet GD, Can self-prediction over-come barriers to Hepatitis B. vaccination? A randomized controlled trial. *Health Psychol* 2012;31:97–105, <http://dx.doi.org/10.1037/a0025298>

¹⁸ Zhang J, While AE, Norman IJ. Nurses' knowledge and risk perception towards seasonal influenza and vaccination and their vaccination behaviours: a cross-sectional survey. *Int J Nurs Stud* 2011;48:1281–9, <http://dx.doi.org/10.1016/j.ijnurstu.2011.03.002> .

¹⁹ Telford R, Rogers A. What influences elderly peoples' decisions about whether to accept the influenza vaccination? A qualitative study. *Health Educ Res*2003;18:743–53, <http://dx.doi.org/10.1093/her/cyf059>.

²⁰ Baars JE, Boon BJ, Garretsen HF, van de Mheen D. The reach of a hepatitis B vaccination programme among men who have sex with men. *Eur J Public Health*2011; 21:333–7, <http://dx.doi.org/10.1093/eurpub/ckq117>

²¹ Cornwall, W. Officials gird for a war on vaccine misinformation. *Science* 369,14–19 (2020).

²² Positive Deviance Initiative. (2010). *Positive deviance initiative*. Retrieved from <http://www.positivedeviance.org/>

large high due to efforts being made globally, and also due to the close involvement and monitoring by key government agencies, particularly of the highest leadership. A few health warriors did however share their apprehension, along with a section of participants with better socio-economic profile, about the expedited clinical trial and approvals of vaccine for use. Moreover, as vaccination drive was yet to begin and hence the cases and reporting of adverse events following immunization (AEFI) was not much into play. Adverse event following immunization is any untoward medical occurrence which follows immunization and which does not necessarily have a causal relationship with the usage of the vaccine. If not rapidly and effectively dealt with, can undermine confidence in a vaccine and ultimately have dramatic consequences for immunization coverage and disease incidence.²³

On the second aspect, Complacency, the study findings did show a large degree of VH, as rural and tribal population, along with youth, both in rural and urban locations, due to their pre-conceived notion of having strong immunity or preference for natural herbs and care, they did not show much inclination towards getting vaccinated when made available. The study findings in a limited way also brought out the reluctance among a section of the population to get vaccinated because of they believed it be against their religious beliefs. Such sections of population should be addressed using different mediums at the earliest possible, and encouraged to get vaccinated. More so, as they constitute a sizeable proportion of India's population.

So, while on one hand, acceptance of COVID-19 vaccine was observed to be high, at least before actual vaccination drive begins, it is highly likely that there will be vaccine hesitant individuals, who accept all vaccines, but remain concerned about vaccines' efficacy, and hence may refuse or delay getting vaccinated, when the vaccine is available and is their turn for the same.

No doubt, refusal or delay in getting vaccinated contributes to gaps in vaccine uptake and immunization coverage—a significant factor in controlling or eliminating vaccine-preventable diseases (VPDs), which due to non-availability of any cure, stands true for COVID-19, as well.

The third contributing factor to Vaccine Hesitancy is Convenience related issues, such as accessibility, in terms of distance and timing; and affordability, in terms of pricing. Making it easy to get vaccinated will increase vaccine uptake, especially for the large proportion of people who are not deliberately avoiding vaccination.²⁴ In fact, what might seem to be reluctance or resistance, or even opposition, might actually be a response to the burdens or inconvenience of getting vaccinated.

²³ https://www.who.int/vaccine_safety/initiative/detection/AEFI/en

²⁴ Schmid P, Rauber D, Betsch C, Lidolt G, Denker M-L. Barriers of influenza vaccination intention and behavior – a systematic review of influenza vaccine hesitancy, 2005 – 2016. PLoS One. 2017;12(1): e0170550. doi:10.1371/journal.pone.0170550.

These could be categorized as Environmental and include, how convenient is the location of the vaccination centre; how time-consuming it will be get vaccinated; and cost, in terms of vaccine price, travel cost or due to loss of wage work.²⁵

The formative research findings too brought out the issues of accessibility and affordability as prime concerns of the population, particularly among socio-economically poor population and those residing in villages. Study participants overwhelmingly favoured vaccines being provided free of cost, the other cost related concern was the travel cost, if a person has to travel a longer distance to get vaccinated. To add to it, it emerged from the study that more distantly the vaccination centre is located, higher the chances people may avoid getting vaccinated was expected.

In addition to this, the study findings highlighted that the momentum of Vaccine Eagerness can be sustained while Vaccine Hesitancy can be reduced through selection of appropriate source of information for messaging on vaccine related to COVID-19 as well as on COVID Appropriate Behaviour. The formative research corroborated the findings of previous studies, which have shown that the source of information plays a crucial role in influencing vaccination rates.²⁶ At the same time it is critical that information sources are relevant and appropriate for the target group.

The formative research thus highlighted the negative correlation between vaccine eagerness and vaccine hesitancy, with source of information being a constant factor. It is therefore imperative that regular communication and messages on pros and cons of taking or not taking vaccine against COVID-19 should be available in public domain. This should be initiated much before the vaccination drive begins among the general public with specific messages for targeted population like youth, women, socio-economically poor and people with strong religious bend of mind.

²⁵ Behavioural considerations for acceptance and uptake of COVID-19 vaccines: WHO Technical Advisory Group on Behavioural Insights and Sciences for Health, meeting report, 15 October 2020. Geneva: World Health Organization; 2020

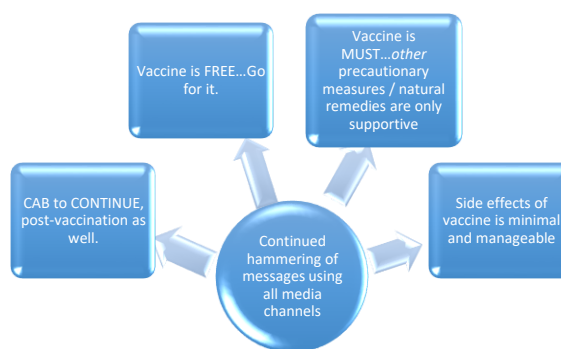
²⁶ Gargano, L. M., Underwood, N. L., Sales, J. M., Seib, K., Morfaw, C., Murray, D., DiClemente, R. J., & Hughes, J. M. (2015). Influence of sources of information about influenza vaccine on parental attitudes and adolescent vaccine receipt. *Human Vaccines & Immunotherapeutics*, 11(7), 1641–1647. <https://doi.org/10.1080/21645515.2015.1038445>

4.4 RECOMMENDATIONS FOR MESSAGES AND COMMUNICATION STRATEGY

Taking a cue from the motivating factors and barriers as well as the vaccine eagerness, acceptance and hesitancy and preferred sources of information, the two broad parameters for communication messages and strategy are identified below. These include,

Motivational messages

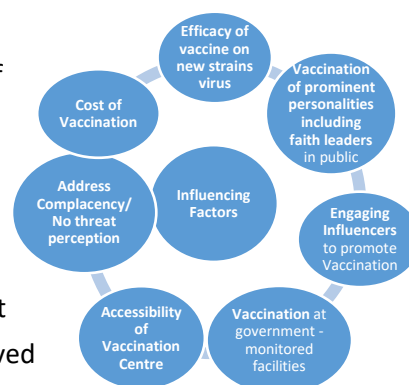
- Corona is life-threatening and a vaccine is the only solution.
- Comparison with the success of Polio vaccination campaign
- Information about the success rate of vaccine; evidence of no/manageable side effects
- low/no price of the vaccine
- People of old age group and with co-morbidity are weak and have low immunity so should take vaccination to prevent COVID-19
- Endorsement by a celebrity or renowned personalities, prominent political leaders



Factors influencing communication strategy

The study findings reinforced the factors influencing communication strategy and could be further classified under

- **Vaccine acceptance & Trust.** This includes -vaccination of prominent personalities; engaging influencers for disseminating messages; vaccination at government monitored facilities
- **Vaccination Hesitancy** by addressing the accessibility of vaccination centre (distance travelled to reach); the cost of vaccination; efficacy and side-effects and low perceived threat



This formative study reiterates few important points and provides evidence for the comprehensive communication strategies developed for the COVID vaccination in India by MoHFW, UNICEF, WHO and other partners.

- ❖ There are some trusted sources of information that will be critical in developing confidence and reducing hesitancy for vaccination. Front-line health workers, ANMs, ASHAs and Anganwadi workers, especially in rural areas and also in urban slum/low income areas, are critical sources of information that people believe and trust. In fact, they cross-validate information from other sources like television and newspapers, social media and health warriors. Therefore, it is critical to ensure correct and consistent information and capacity-

strengthening efforts are made with such frontline health workers. Other local trusted sources, as mentioned in our study and the strategy document include PRI, local NGOs, Volunteers.

Television, newspapers and social media, particularly in urban areas, are popular sources of information and messages, which will further get strengthened by having important leaders (PM/CMs), eminent scientists, health experts, and doctors addressing the issues or regularly participating in discussions held on different platforms.

WhatsApp messages among friends and family (known sources) are also considered as a reliable source for information on COVID-19 related regular updates.

In this study, it was noticed that consistent information across various sources when reinforced is retained and remembered. Therefore, the use of multiple mediums and platforms with the same, correct and consistent messages will be critical as the vaccination drive is initiated in the country.

- ❖ While there is an eagerness for the vaccine across the states, locations, class and gender of participants covered in the qualitative study, there was obvious hesitancy also visible both for self and for community members. The study brought out the apprehension on vaccine effectiveness even by a few health warriors. Hence it is important to raise the confidence levels of health warriors by providing regular scientific communications messages. This, in turn, will have a larger ripple effect on the community served by these health warriors in increasing the trust in the vaccine.
- ❖ CAB is diminishing day by day among community members, even though the vaccination drive is yet to start. Reiterating messages on CAB to be followed pre, during and post vaccination should be a top priority in messaging across all mediums. Enforcement agencies need to continue being alert and strict to ensure CAB is being practiced in public spaces.
