

Using Behavioural Science & Human Centered Design to Boost COVID-19 Vaccination

Insights and Strategic Interventions

12th July, 2021



Executive Summary

- The study aims to use a behaviour science and human centred design approach to understand the barriers to uptake of COVID-19 vaccines, and use this fundamental understanding to design interventions to drive vaccine uptake in Punjab and Maharashtra. Our methodology involved remote in-depth interviews with stakeholders, and users with barriers to COVID-19 vaccination in rural and urban Nagpur, Bathinda and Faridkot.
- For most vaccinations in India, the decision is a default. However, taking the COVID vaccine which is new and unfamiliar and introduced within this uncertain, dynamic environment, is an active decision to be 'made' and therefore deliberated. The COVID pandemic is a dynamic context, in terms of the disease spread, government rules, and constant flux of new information, which influences the COVID risk perceptions and compliance or mitigation measures engaged in, especially vaccine uptake.
- The formal government communication around the vaccine has been perceived to be clinical, operational, generalised and not catering to individuals' different needs. Therefore, individuals default to existing vaccine mental models and seek out information from informal news channels (i.e. social media) and others' 'lived experiences', which has led to incorrect beliefs around the purpose of the vaccine (protection vs. prevention vs. treatment), misinformation and perceived high negative consequences of taking the vaccine.
- The vaccine decision is based on a feeling of risk and reward than an objective analysis. The trade-off considered is two fold, for taking the vaccine and for not taking the vaccine, as the vaccine is perceived as a deliberate action taken to disrupt the current 'healthy' state or status quo. The risks of taking the vaccine are high (due to the salient negative stories) with low to no reward and the rewards of inaction are high, with low risk therefore inaction is favoured. This is not an individual decision, rather influenced by family members, friends and employers.
- These decisions manifest as 4 types of barrier narratives around why they do not want to take the vaccine.
 - **Vaccine is irrelevant:** Perceive themselves to be at low risk of COVID, especially of severe illness as they feel they have high immunity and are healthy.
 - **Vaccine is scary for me:** Perceive high risk of COVID, and they anticipate several risks of worsening health condition from the vaccine.
 - **Vaccine is a 'costly' alternative:** Perceive mid to high risk of COVID but consider their current actions to be sufficient to manage it. They feel the vaccine will disrupt the sense of control and certainty they have managed to achieve.
 - **Vaccine is a scam:** Perceive low to no risk of COVID, they harbour distrust in the government, health system and pharmaceutical companies.
- The 4 strategic directions to drive vaccine uptake includes addressing information gaps, managing misinformation, enabling better trade-offs and encouraging advocacy and adherence. This study has identified 12 interventions in total and detailed one key intervention addressing each of the strategic directions.



**Addressing
information
gaps**



**Managing myths
& misinformation**



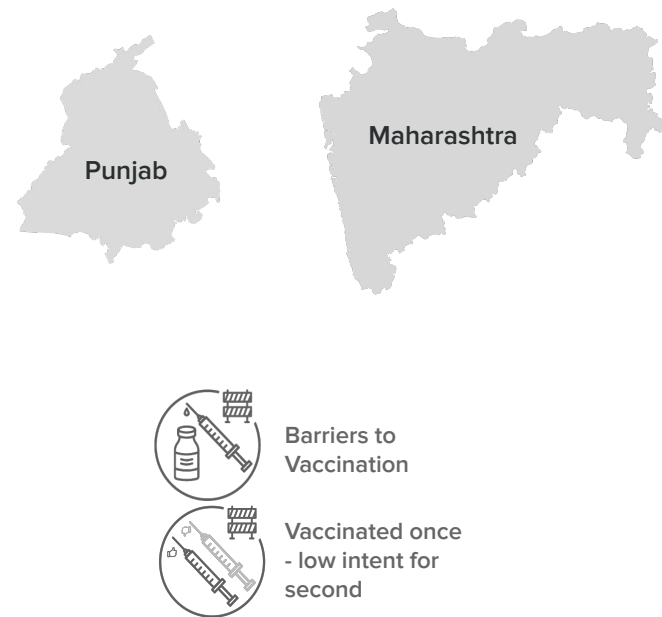
**Enabling better
trade-offs**



**Encouraging
advocacy &
adherence**

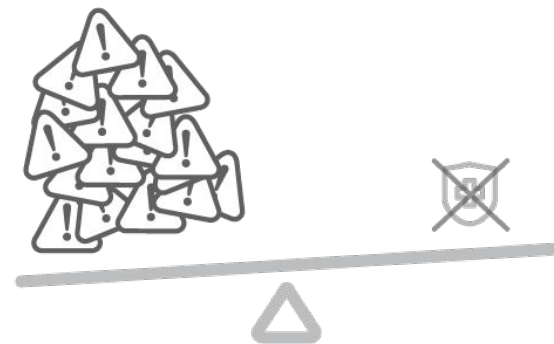
Project Context

- The study aims to use a behaviour science and human centred design approach to understand the barriers to uptake of COVID-19 vaccines, and use this fundamental understanding to design interventions to drive vaccine uptake in Punjab and Maharashtra.
- Research was conducted in Rural and Urban Nagpur, Bathinda and Faridkot. Our methodology involved two rounds of research
 - **Remote in-depth interviews** with users with barriers to COVID-19 vaccination, and other stakeholders (frontline workers, nodal officers, doctors)
 - Post the insights and strategic drivers, we **rapid tested the intervention** concepts with user with barriers to vaccination and relevant stakeholders (Vaccination staff, Front line workers, Local Govt, State Nodal officers)



Key Insights

- For **most vaccinations in India, the decision is a default**. However, taking the COVID vaccine which is new and unfamiliar and introduced within this uncertain, dynamic environment, is an **active decision to be 'made'** and therefore deliberated.
- The **COVID pandemic is a dynamic context**, in terms of the disease spread, government rules, and constant flux of new information, which influences the COVID risk perceptions and compliance or mitigation measures engaged in, especially vaccine uptake.
- The formal government communication around the vaccine has been perceived to be clinical, operational, generalised and not catering to individuals' different needs. Therefore, **individuals default to existing vaccine mental models** and seek out **information from informal news channels** (i.e. social media) and **others' 'lived experiences'**, which has led to **incorrect beliefs around vaccine purpose** (protection vs. prevention vs. treatment), **misinformation** and **perceived high negative consequences** of taking the vaccine.
- The vaccine decision is based on a **feeling of risk and reward than an objective analysis**. The **trade-off considered is two fold**, for taking the vaccine and for not taking the vaccine, as the vaccine is perceived as a deliberate action taken to **disrupt the current 'healthy' state or status quo**. The **risks of taking the vaccine are high** (due to the salient negative stories) **with low to no reward** and the rewards of inaction are high, with low risk therefore inaction is favoured.
- This is not an individual decision, rather influenced by family members, friends and employers.



4 key vaccine barrier narrative

The decision of not taking the vaccine is arrived at based on how the **COVID context is perceived**, the **norms around COVID vaccination** and the **feelings of risk and reward**. These decisions manifest as 4 types of negative narratives around why they do not want to take the vaccine.



Vaccine is scary for me

Perceive high risk of COVID given the high caseload and death rates around. Their old age, medical condition and comorbidities contribute to high risk of COVID. They anticipate several risks of worsening health condition and view the vaccine as scary.



Vaccine is 'costly' alternative

Perceive mid-high risk of COVID but consider their current actions to be sufficient to manage it. They view vaccines as a 'costly' alternative, as they feel the vaccine will disrupt the sense of control and certainty they have managed to achieve.



Vaccine is irrelevant

Perceive themselves to be at low risk of COVID, especially of severe illness. They feel the vaccine is irrelevant to them as they may be young, have high immunity and engage in healthy behaviours.



Vaccine is a scam

Perceive low risk to no risk of COVID. They view the vaccine as untrustworthy as there is a significant amount of distrust in the government, health system and pharmaceutical companies.

Strategic Directions

For those with second shot hesitancy, the barriers included high experienced side effects from first dose, low intent for first shot (spontaneous decision, forced), expectation discrepancy from vaccinated people contracting COVID and negative social norms.

The 4 strategic directions to drive vaccine uptake includes addressing information gaps, managing misinformation, enabling better trade-offs and encouraging advocacy and adherence.

This study has identified 11 interventions in total and detailed one key intervention addressing each of the strategic directions.



**Addressing
information gaps**



**Managing myths &
misinformation**



**Enabling better
trade-offs**



**Encouraging advocacy
& adherence**

Intervention Summary



Addressing information gaps

Barrier Focussed Communication Campaign

Vivid campaign focussed on relevant emotional benefits of taking the vaccine, customized to 4 barriers narratives and reframing side effects

Reframe Uncertainty as an Opportunity to Act

Create Positive Stories to Reduce the Dissonance



Managing myths & misinformation

Localized Community Misinformation Management

Create a local committee leveraging trusted people in the community to reduce spread of misinformation through tracking and debunking vaccine myths

Manage AEFI and Related Narratives Locally



Enabling better trade-offs

Customized Communication Approach for Field Workers

Transition 1-1 FLW vaccine conversation to start with an understanding of specific barriers and myth and provide customised benefits to drive uptake

Provide Incentives to Build Coping

Create Cost for Inaction



Encouraging advocacy and adherence

Vaccine Experience - Behavioural Guidelines

Builds on existing vaccination site guidelines, to ensure a uniform positive experience, extending advocacy to family and 2nd shot adherence

Ensure Adherence by Roadmapping Next Steps

Drive Second Shot Commitment through the Journey

Barrier Focused Campaigns - Intervention illustration

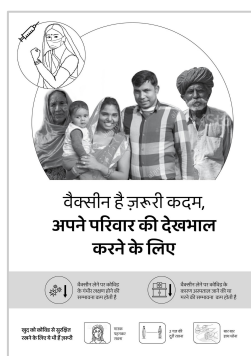
As the communication has been clinical and operational, individuals do not see a clear benefit of taking the vaccine. The campaign vividly represents relevant benefits in a hierarchy which is meaningful to individuals.

The communication has been generalised (all 18+) and individuals question its benefit and appropriateness to themselves. The campaign uses customised benefits to counter specific barriers.

Side-effects after vaccination, a key barrier is addressed through communication of it being familiar, common and providing clear action to cope.



Pregnant and Lactating Women:
Drive benefit of protecting their infant



Vaccine is a 'costly' alternative: Leverages identity of prime member of family and benefit of taking care of them



Vaccine is a scam:
Drive benefit of being able to focus on work, earning and studies without hitch



Localized Community Misinformation Management

This intervention has been carefully designed to identify trusted people and channels in the community, leverage them to reduce spread of misinformation and debunk the existing ones.

The Identified trusted agents, state representative and a local medical expert would form a misinformation committee to debunk existing myth and track new myths to counter through the

IDENTIFYING AND ACKNOWLEDGING THE TRUSTED PEOPLE IN COMMUNITIES

Identify and acknowledge people in the specific communities who understand the relevance of COVID vaccine and are trusted by the community.

SYSTEMATICALLY DEBUNKING THE MISINFORMATION

Myths are likely to continue to stick if we they are only tagged as questionable or from an untrustworthy source. Systematically debunk the misinformation by using a behavior scene informed structure

TRACE AND ADDRESS NEW MISINFORMATION

From the end users, identified trusted agents provide feedback and would actively share new prevalent myths and misinformation with the committee, which experts would provide relevant facts to help in debunking the same.

Customized Communication Approach for Field Workers

The new approach can be conveyed through short engaging whatsapp videos. The video would involve an experienced ASHA worker talking through the new approach to aid conversation and an example conversation. This will be supplemented with 'reference sheets' shared on whatsapp or printed that can be easily referenced.

The aim of the interaction should move to understanding the barriers and myths held by the user, and based on their responses to use the specific barrier benefit or myth debunking.

Acknowledge the role of ASHA in managing the pandemic, and introduce this approach to aid difficult conversations to drive vaccine uptake. As all conversations are different, this is a simple flow that can be customised to use in any conversation.

	Rather than	Say
UNDERSTAND THEIR VACCINE BARRIERS AND MYTH	Starting the conversation with why they should get vaccinated	Start with understanding what they actually think about the vaccine and what their barriers or myths are
ADDRESS THEIR SPECIFIC BARRIER AND MYTH	Giving an overall vaccine benefit	Provide a benefit of the vaccine and a need that is related to the specific barrier/reason they give
	Giving only your own vaccination example	Tell them a vivid experience of another related relevant person, with a similar experience and why they took the vaccine
	Shutting down the vaccine related myth	Start with the simple facts in a easy way and explaining the fallacy
REINFORCE SPECIFIC VACCINE BENEFIT	Focussing on attitude change	Reinforce the specific vaccine benefit, use the number of people who have already taken the vaccine in the village/town/state to direct action for taking the vaccine

Vaccine Experience - Behavioural Guidelines

The first shot vaccine experience is crucial to ensure commitment for second shot and advocating to others in the family and larger community.

This intervention aims to add to the existing vaccination site guidelines from a behavioural perspective, to ensure a uniform positive experience, and counter barriers at the 3 stages of the vaccine process:

- Registration
- Vaccination
- Waiting Room

कोविड परिवार सुरक्षा कार्ड

वैक्सीन है ज़रूरी कदम, खुद को और अपने परिवार को सुरक्षित रखने के लिए

वैक्सीन लेने पर कोविड के गंभीर लक्षण होने की सम्भावना कम होती है

वैक्सीन लेने पर कोविड के कारण अस्पताल जाने की या मरने की सम्भावना कम होती है

वैक्सीन खुद भी लें, परिवार को भी लगवाएं

नाम : _____ फुल्ले ड्रेस की तस्वीर

वैक्सीन: _____ दूसरी ड्रेस की तस्वीर

परिवार के सदस्य जिनको अब वैक्सीन लगाने के कोविड से सुरक्षित रखना चाहते हैं

नाम
1.
2.
3.
4.
5.

बधाई हो, आपने कोविड से सुरक्षित रहने के लिए एक ज़रूरी कदम उठाया! आप फुल्ले ड्रेस COWIN APP से डाउनलोड करें

वैक्सीन का पूरा लाभ उठाने के लिए दूर

इनमें से कुछ साइड इफेक्ट्स कम होना सामान्य है

वैक्सीन की जगह पर सूजन और दर्द

सर दर्द

उल्टी

बुखार

हाथी दर्द

पेट दर्द

अगर ये साइड इफेक्ट्स हो तो पैरालैक्सन देवाई लें

4 दिन से ज्यादा 4 दिन से ज्यादा तब तक लें तो PHC या पास के अस्पताल जाए

वैक्सीन के बाद यह ना करें

एक हफ्ते तक लालक का सेवन और धूम्रपान ना करें

2-3 दिन तक भारी काम ना करें

खुद को कोविड से सुरक्षित रखने के लिए ये

अभी भी हैं ज़रूरी

1. मास्क पहनकर रखना

2. 7 मिनट की दूरी रखना

3. बार बार हाथ धोना

The back page of the Family Protection Card aims to drive expectation and build coping for side effects, provide necessary information on when to seek care and reinforce continuation of CAB post vaccination.