

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


Insights and Strategic Interventions

12th July, 2021

Executive Summary

- The study aims to use a behavior science and human centred approach to understand the barriers to COVID-19 testing, and use this fundamental understanding to design interventions to drive the ‘right user’ to get tested at the ‘right time’ in Maharashtra and Punjab. Our methodology involved remote immersion interview with stakeholders and users with barriers to COVID-19 testing in urban and rural Nagpur, Bhatinda, and Faridkot.
- From our research we found that, The COVID-19 context is more than just a disease context, it has political, economic, social and law enforcement dimensions, therefore testing for COVID-19 is more than just a medical decision.
- The COVID-19 disease is perceived as unreal and unfamiliar but with familiar flu like symptoms. The inability to make sense of the disease, creates a sense of dissonance within individuals which leads them to seek out existing disease mental models (like ‘test only when there are symptoms’) that don’t apply to this disease. The unfamiliarity, coupled with the dynamic directives/communication on testing provides the space for “reinterpretation” and “rationalization” on when to test and when not to test.
- Among this cohort, the COVID-19 testing decision is met with negative action tendencies or behaviors due to the non-optimal risk perceived from COVID-19 disease from their COVID and disease context, the anticipated negative consequences of testing positive and the low perceived ability to cope with the consequences of COVID-19 disease.
- We found 4 categories of negative COVID-19 testing behaviours, ranging from delaying to denying COVID-19 test
 - **Delaying testing:** Contracting COVID is a big concern which is dealt with by taking several steps to manage each aspect of it, therefore they view tests as a last resort
 - **Indifferent to testing:** Recognize the risk of COVID in general and to high risk family members but perceive low to no risk for self as they have strong immunity, therefore they view test as irrelevant.
 - **Opposed to testing:** Consider COVID to be like a normal flu or a conspiracy therefore perceive no risk. They harbour mistrust and view tests as a mechanism for exerting control.
 - **Denying testing:** Concerns around not being able to deal with a positive test result leads leads to complete avoidance of the chance of contracting COVID, therefore they view tests as a too “costly”.
- To manage the pandemic, testing is an essential behavior, this research outlines 9 key interventions to focus on to reduce barriers across the various behavior categories to drive the uptake of testing for at risk people at the right time. We have detailed out 6 of the 9 critical interventions

Intervention Summary



System Change



New Influencer



Users' Experience

Onboarding of
Community Leaders

Doctor Recommendation

Testing Decision Tool

Health Focussed
Approach

Medical Store Recommendation

Favourable Testing
Narratives

Institutional Quarantine
Experience Guidelines

Testing Journey:
Behavioural Guidelines

Caregiver toolkit

Detailed Interventions

Illustrative examples of artefacts, message framings as well as communication and service delivery changes along with principles and guidelines to be followed. This is to enable easy visualisation and uptake by relevant teams for creating implementable versions.

Onboarding of Community Leaders

To address barriers of those who perceive COVID as a conspiracy and harbour high distrust in the government and health systems, there is a need to leverage the inherent trust in local community leaders (panchayat, religious leaders, NGOs) to drive testing uptake in the community

Target Group + Most Relevant Behaviour Category



Panchayat leader, Religious leader and NGOs (Punjab)

Opposed to testing

Channel



Position of medical expertise and who is concerned for people's health and well-being, who comes from the community , such as a Medical officer or Senior most Doctor of PHC

Onboarding of Community Leaders

To build positive sentiment towards testing, this is the message framing from the state medical officer to the local leaders on the need for support, the benefits of testing and importance of testing along with vaccination.

Panchayat leaders may be unable to publicly plan and promote testing due to their conflicting goals of aligning with the community's stance and beliefs. However, they could be onboarded to communicate positively and indicate support of testing being conducted as an important health activity.

Religious leaders are trusted, respected and perceived as concerned about the welfare of the community.

Communication to panchayat and religious leaders needs to be through a person from the local community who comes from a position of medical expertise and concern for people's health and well-being, not a position of power or authority.

Eg. Medical officer or senior most doctor of a PHC.

Highlight common goal of maintaining health of people, ability to focus on work and life without restrictions

Benefit of timely treatment of individual and protection of community from disease

Highlight the benefit of testing early to understand the illness, treat early and containing spread in the village

Acknowledge the effort made to drive vaccine

Message to communicate need for their support

Pichle ek mahine mein, humne hamare gavon/samaj mein XX logon ko gambhir bimari se grast aur XX logon ki mrityu hote dekha hai. Ye sthiti badi hi chintajanak hai aur ye zaruri hai ki hum apne gaon/samaj ke logon ki sehat banakar rakh paye taki vo apna kaam aur rozmarra ki zindagi acchi tarah bita payein. Aap ke gaon/samaj ke logon ke swasthya ko surakshit rakhne ke iss kaam mein hume aap ki sahyog ki zarurat hai.

Jald test karane se hum ilaj samay par kar pate hain aur kam logon tak bimari phailti hai. Aap gaon/samaj ke mukhya hain, log aap ka maan karte hain, kripya aap gaon/samaj mein karaye ja rahe testing camps mein apna samarthan dikhaye.

Highlight negative health impact of COVID close to home for them

Highlight need for their support

Highlight self-image to increase relevance for testing for community

Message to communicate benefit of testing

Aapne X gaon/samaj ke bare mein suna, bahut smart tareeke se unhone apne aap ko COVID se surakshit rakha hai. Uss gaon/samaj mein jisse bhi shanka hoti hai ve sahi samay par test kara lete hain, iss vajah se jise COVID hota hai uska samay par ilaaj shuru ho jata hai aur dusron ko phailta bhi nahi hai. Kisi bhi bimari ka test karenge tabhi toh use samajh payenge, uska ilaaj kar payenge, phailne se rok payenge, abhi aap ke gaon mein bhi bimari ka ilaaj karne aur na phailne dene ke liye test pehla kadam hai.

Create a comparison to another 'smart' village and acknowledge the positive behavior to showcase ideal behavior

Add data of a 'smart' village if available to illustrate the message

Message to indicate equal importance of testing and vaccination

Aap bahut accha kaam kar rahe hain logon ko COVID ki vaccine lene ke liye keh rahe hain. Halanki vaccine COVID ke karan gambhir bimari aur mrityu ki sambhavna kam karti hai, infection fir bhi ho sakta hai aur phail sakta hai. Taki infection aap ke gaon/samaj mein na phaile, ye zaruri hai ki vaccine ke saath saath hum shanka hone par test bhi karate rahein.

Highlight need for testing to track and arrest the spread in the village

Onboarding of Community Leaders

As neutral agents (NGOs) are known to have no vested interest, there is a need for them to promote testing. The intervention includes goal aligned message framing to drive the benefit for testing rather than only access.

The NGO is perceived to have no vested interest, and neutral intent. Leverage NGOs to communicate to people benefits of testing that are aligned to their own goals along with creating access.

Highlight testing as an activity done by them in the past for other diseases

Highlight medical benefit to self

Message to be given to people by NGOs

Baki bimariyon ki tarah COVID mein bhi test karwane ki zarurat hoti hai taki sahi aur samay par ilaaj shuru ho sake. Ye bimari bahut jaldi phailti hai, apne parivar aur gaon ke logon/samaj ko infection se bachane ke liye jald test karwayein. Agar aap ko ya ghar ke kisi sadsaya ko shanka hai ki ve kisi covid positive vyakti se mila ya pichle paanch dinon se khansi, sardi, bukhaar, thakan, gale mein kharash, shareer dard, dast, ya ulti mein se ek bhi takleef hai toh COVID test karwayein.

Highlight need for testing to protect family and close knit community

Communicate when to test

Health Focussed Approach

Individuals do not trust the government and perceive COVID testing as a part of a conspiracy. There is a need to establish testing as a medical decision that is communicated by local medical experts as compared to directed by state and enforced by police.

Target Group + Most Relevant Behaviour Category



State (Punjab)

Opposed to testing

Channel



Testing experience, Testing camps and Testing center

Health Focussed Approach

Shifting all communications and events regarding testing from government requested to medical necessity suggested by medical experts.

Visible shift in position of authority & face of testing from government and police to medical experts

DECOUPLE LAW ENFORCEMENT FROM TESTING

SHIFT FROM

Using police / law enforcement to regulate testing at police naaka

TO

Setting up camps in a centralized location in a village at an organised event by announcing it as a medial activity

Continuing 'Mandatory testing' (for drivers license, for travel, for work) which is more aligned to their individual goals and includes a sense of choice

LOCAL MEDICAL VS STATE MESSENGER

State involvement in testing and communication of test results

Highlight trusted local medical experts and PHC for testing, result communication

- Showcase that sample collectors and lab technicians are from the community and not outsiders
- Testing result and case follow up from local medical institutions
- All written communications through local medical institutions and without government logos
- No govt or political party logos on testing camps

Doctor Recommendation

While individuals rely on doctors to recommend testing, doctors might feel their clinical acumen is higher than tests and might delay testing unless severe, therefore we need to encourage doctors, both formal and informal to suggest testing.

Target Group + Most Relevant Behaviour Category



Formal and Informal Doctors

Delaying Testing

Channel



State for the informal doctors
 Reputed Doctor Organization
 for formal Doctors

Doctor Recommendation

With formal doctors, this aims to partner with doctor associations to drive doctors to suggest testing through goal aligned framing, updated decision heuristic (mental shortcut) and a visual reminder

Appreciate the role they have played in the management of the pandemic and acknowledge the burden

Establish the increased complexity of the disease

Establish higher order benefits and connect it to social identity

Align to doctor's goals

Highlight the high level goal tied to self image

Messenger needs to be a reputed organization

Letter to Formal doctor from Reputed Doctor Organization

To Dr. _____ ,

• We appreciate your role and contribution in managing the COVID pandemic and adapting to the dynamic situation. We are aware of the burden you have faced due to COVID in the last year and we are calling on your support for the following months as well.

• With the newer COVID mutations and post the deadly second wave, you need to be cautious and not let your guard down. As you already might be doing, you need to promote vaccination amongst yours patient and community, and also continue to focus on early testing - as the more we test, the better our ability as a medical community to track the illness, contain the spread and reduce the burden on the healthcare system as well.

• You know your patient the best, we request that when there is an index of suspicion of COVID, test early for the lowest criteria, rather than the highest criteria as patients only quarantine from family and the community after a COVID positive test. Attached is a small visual reminder, designed based on current COVID criteria suggested by the <ICMR>, as the situation is dynamic.

• We, together as a medical community need to lead the way to contain and manage the the pandemic, encouraging vaccination and early testing for all our patients and community.

• Regards,
<Doctor Organization>

Call for their support

Highlight need for vaccination as well as early testing

Provide a tweak to an existing doctor heuristic


Introduce the artefact as a small reminder

Doctor Recommendation


With formal doctors, along with the letter, attach a visual reminder to cue COVID symptoms and situations.

Introduced as we cue vs prescriptive tool


Cue for when a COVID-19 test is advisable
Consider a test if your patient has been in any one of these situations




Does your patient have anyone at home who is COVID positive?




Has your patient spent time with a COVID positive person or someone who soon tested positive?



How often does your patient travel in public transport/ go to work/ go to markets?





Are people around your patient (family/ coworkers) experiencing any symptoms ?





Is your patient experiencing any one of the below symptoms since 5 days?


COVID-19 Symptoms



Cold



Cough



Fever


Fatigue


Body Ache


Headache


Upset Stomach


Shortness of Breath

Moving framing from criteria to situation

Written as patient scenarios to help assess contact and symptoms

For Illustrative Purposes only.

Visual cue of all the COVID-19 Symptoms

Doctor Recommendation

With informal doctors, this aim to use the state as a messenger to drive authority heuristic with the doctor to recommend testing, and heighten risk perception due to increased fatality and complexity of the COVID disease. Perceived risk is also heightened by attributing responsibility of potential mismanagement and escalation of illness leading to loss of trust within the community.

Establish the increased complexity of the disease

Heighten relevance of testing

Instruct to prescribe testing

Instruct use of tool with every patient

Circular from State to Informal Doctors

आप जानते हैं की हमारे देश में COVID-19 की महामारी चल रही है । ये मामूली फ़्लू नहि है। वाइरस के जो नए स्ट्रेन हालहि में लोगों में पाए गए हैं वो और भी ज़्यादा प्रबल है। कोरोना की दूसरी लहर में हमारे ज़िला में कोरोना के कारण XX लोगों की मृत्यु हुई है।

इन मृत्यु का अहम कारण है की लोग कोविड को मामूली फ़्लू समझके इलाज करते हैं और समय पर टेस्ट नहीं कराते हैं। हम जानते हैं की आप के समुदाय के लोग, सेहत बिगड़ने पर आपके पास आते हैं। अगर किसी को कोविड होने की सम्भावना हो तो तुरंत उन्हें टेस्ट करवाएँ। अगर आप फ़्लू का इलाज बताएँगे और टेस्ट में देर करेंगे तो बीमारी बढ सकती है और मरीज़ की तबियत अचानक बिगड़ सकती है। हमारे ज़िला में ऐसा कई बार देखा गया दूसरी लहर में।

लोग आप के पास भरोसे से आते हैं, उनका भरोसा ना तोड़े और उनके जीवन और सेहत की रक्षा करें।

दी गयी पर्ची पर कुछ सवाल और लक्षण बताए गए हैं, निर्धारित करने के लिए की टेस्ट करवाने की ज़रूरत है या नहीं। इस पर्ची का उपयोग आपके पास आने वाले हर व्यक्ति के साथ ज़रूर करें।

Heighten risk perception through statistics on deaths in their area

Attribute responsibility of potential escalated illness on delay in testing by them


Highlight risk of breaking the trust of the community

Doctor Recommendation


For informal doctors, along with the circular, provide a tool with questions to ask patients for diagnosis and list of COVID symptoms.

Prescriptive tool,
outlining the questions to
ask patients


मरीज़ से पूछने के लिए सवाल - एक भी सवाल का जवाब हाँ हो तो तुरंत टेस्ट करवाएँ तो टेस्ट करवाएं




क्या आपके मरीज़ के घर में कोई कोविड पॉज़िटिव है या कुछ ही समय पहले था?




क्या आपके मरीज़ ने किसी कोविड पॉज़िटिव व्यक्ति के साथ समय बिताया है या ऐसा कोई जो कुछ दिनों में पॉज़िटिव पाया गया?



आपका मरीज़ कितनी बार बस, ट्रेन इत्यादि में यात्रा करता है/ काम पर जाता है/ बाजार जाता है?





क्या आपके मरीज़ के आसपास के लोग (परिवार/सहकर्मी) को कोई लक्षण या तकलीफ है?





क्या आपके मरीज़ को नीचे दिए गए लक्षण में से एक भी पछिले 5 दिनों से है?


कोविड-19 के लक्षण



सर्दी



खांसी



बुखार


थकान


शरीर में दर्द


सरदर्द


पेट खराब


सांस लेने में कठिनाई

Written as patient questions to help assess contact and symptoms

For Illustrative Purposes only.

Visual cue of all the COVID-19 Symptoms

Testing Decision Tool

As the criteria of COVID-19 testing is 'clinical', it is difficult for individuals to understand and easy to rationalise against. This tool drives individuals to recognize the need for a test in a more relatable manner.

Target Group



Relevant for all, especially for the Delaying behaviour category

Channel



Newspapers, social media platforms, local medical stores

Clear call to action indicating when to test

Vivid visual real life questions to trigger reflection

Reiterate call to action

End with a benefit of testing relevant to them

For Illustrative Purposes only.

करोना तो नहीं है ना ? एक भी जवाब हाँ हो तो टेस्ट करें

Primary msg, draw attention by highlighting existing dissonance

Start with situations related to potential contact as it is unfamiliar, hence often not considered or recognized

Use realistic illustrations

Binary questions

Provide a list of testing centres, addresses and contacts at the back for ease of access and to drive action

Disclaimer to reiterate the function of the tool



क्या घर का कोई सदस्य कोविड पॉजिटिव है?
हाँ / नहीं



क्या कोई पड़ोसी कोविड पॉजिटिव है?
हाँ / नहीं



क्या पिछले हफ्ते में आपने ऐसे वियक्ति के साथ समय बिताया जो कोविड पॉजिटिव था या बाद में कोविड पॉजिटिव आया?
हाँ / नहीं



क्या पिछले हफ्ते में आप के साथ काम करने वाला कोई व्यक्ति कोविड पॉजिटिव आया है?
हाँ / नहीं



क्या पिछले 5 दिनों से आप को खांसी, सर्दी, बुखार, धकान, गले में खराश, शरीर में दर्द, दस्त या उल्टी में से एक भी तकलीफ़ हुई है?
हाँ / नहीं



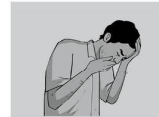
क्या आप को स्वाद या गंध आना बंद हो गया है?
हाँ / नहीं



क्या आपने पिछले हफ्ते में मरी हुई बस/ट्रेन में लंबी यात्रा की है?
हाँ / नहीं



क्या आप पिछले हफ्ते में किसी शादी / सभा / अंतिम संस्कार में गए जहाँ 50 से ज्यादा लोग आए?
हाँ / नहीं



क्या पिछले 5 दिनों से घर के किसी सदस्य को खांसी, सर्दी, बुखार, धकान, गले में खराश, शरीर में दर्द, दस्त या उल्टी में से एक भी तकलीफ़ हुई है?
हाँ / नहीं



क्या घर के सदस्य को स्वाद या गंध आना बंद हो गया है?
हाँ / नहीं

एक भी हाँ हो तो टेस्ट करें,
टेस्ट है पहला कदम इलाज का।

ध्यान दें:

ये पर्वी डीक्टर नहीं है और बीमारी की पहचान नहीं कर सकती है, ये सिर्फ़ टेस्ट करने या नहीं का निर्णय लेने में सहायता करेगा। कोविड-१९ एक नई बीमर है और हम रोज़ इसके बारे में कुछ नया सीख रहे हैं। अगर आपको कोई भी शंका हो तो डीक्टर से सलाह अवशिया लें।

Favourable Testing Narratives

Testing is associated with low relevance or high anticipated consequences of positive results and a low ability for individuals to cope, therefore there is a need to share category specific stories of people taking a COVID test and their journey reframed as getting a positive test to be a step to control the illness. These narratives can be used by contact tracers (on call and on field) and community workers to encourage testing. These can also be used for vivid newspaper snippets.

Target Group



For all - Behavior category informed messaging

Channel



Local Radio
 Contact tracers
 Community workers

Favourable Testing Narratives

Description of category

Delaying testing



Contracting COVID is a big concern which is dealt with by taking several steps to manage each aspect of it

View test as the last resort

BEHAVIOR CATEGORY: DELAYING

Building relevance for barrier of loss of control and low ability to manage family and bread earning responsibility

Suresh test karwane se ghabra raha tha, “agar ghar ka main aadmi hi positive ho gaya toh kaise chalega! Kaam kaise hoga, sab ka dhyan kaun rahkega, aur sab ko bhi ho gaya toh!” Fir Suresh ke dost, Uday ne usse kaha, “maine samay se test karwaya, isi liye toh ilaaj jaldi ho gaya. Baki parivar ka bhi turant test karwa liya toh pata chal gaya ki sirf meri Mrs ko hua hai toh hum dono alag room mein rahe. Ma, bacche sab surakshit rahe. Suresh, meri baat maan, test karwa le. Sahi samay par karwa lene se, kaam aur paise ka kam nuksaan hota hai aur khud ki, parivar ki, sab ki sehat ka dhyan rakha jata hai.”

Reinforce the benefit of testing as lower costs and greater protection of the full family

Highlight benefit of early treatment leading to greater control over disease and care of the full family

Favourable Testing Narratives

Description of category

Indifferent to testing



Recognize the risk of COVID in general and to high risk family members but perceive low to no risk for self as they have strong immunity

View test as unnecessary

BEHAVIOR CATEGORY: INDIFFERENT

Mera dost mujhe 2 ladkon ke bare mein bata raha tha, Naresh aur Hemant, hamari hi tarah kam umar ke hain, acchi sehat thi, accha khana khate the, vyayam karte the aur unhe covid ki bimari ki itni chinta nahi thi. Naresh jiske saath roz padhta tha usko covid hua par naresh ne socha tha ki test karane ki zarurat nahi, woh toh bilkul thik hai. Hemant ko kuch dinon se sardi khansi thi par usne socha tha ki ye sab toh hota rehta hai, apne aap thik ho jayega. Mere dost ne bataya ki un dono ko covid hua hai aur bahut gambhir lakshan hain, unke parivar mein sabhi ke lakshan gambhir hai. *Doctor ne kaha ki woh dono samay se test karwate toh samay par sahi ilaaj ho pata Mere dost ne kaha,* "main toh sunke dar gaya, kisi ko bhi covid ho sakta hai, test karane mein bilkul bhi der nahi karni hai, test karwayenge tabhi toh parivar ko covid dene ki sambhavna kam hogi aur samay par sahi ilaaj hoga"

Building relevance for the low risk internalization

Trigger anticipated regret for not testing in time through medical authority

Refer to negative behavior related to testing

Highlight dire consequences of negative behavior for self and loved ones

Reinforce the need for early testing to prevent spread to family

Favourable Testing Narratives

Description of category

Opposed to testing



COVID is like a normal flu, we all have had these symptoms in life, no one dies of these things

View test as a mechanism to control

BEHAVIOR CATEGORY: OPPOSED

Manjeet ko jab phone pe message aaya tha ki unka covid test positive aaya hai, ve bahut pareshan ho gaye the kyunki vo toh bilkul thik the. Paas ki davai ki dukan mein kulwinder se unki saalon se jaan pehchan thi isliye manjeet ne unse baat ki. Kulwinder ne kaha tha, "covid mein aisa ho sakta hai, kabhi kabhi lakshan nahi dikhte par humse dusron ko bimari phail sakti hai. Apne parivar ka dhyan rakhne ke liye aap alag kamre mein raho aur un sab ka bhi test karva lo. Agar kisi ko bhi koi takleef ho toh mujhe batana kya davaiyan chahiye, main ghar bhej dunga."

Conveyed through medical store owner, a known and trusted agent,

Leverage the need to protect family to drive compliance to quarantine behavior

Drive relevance through highlighting concern from a positive test result with no symptoms experienced.

Explain the asymptomatic nature of the disease and need for quarantining to safeguard family

Favourable Testing Narratives

Description of category

Denying testing



Concerns around not being able to deal with a positive test result leads to complete avoidance of the chance of contracting COVID

View tests as too costly

Highlight benefit of early testing to be able to make informed decisions on nature of treatment required, home / institutional quarantine / hospitalisation

Build coping by elucidating low financial burden at hospital and right care at quarantine centre

BEHAVIOR CATEGORY: DENYING

Gayatri pehle toh doctor ke paas hi nahi ja rahi thi aur fir doctor ne covid test karane kaha toh inkar kar diya. Vo soch rahi thi, "positive aa gaya toh kaise rahungi akele quarantine centre mein aur fir aspatal jana pada toh!"

Gayatri ki behen ne kaha, "kya soch rahe ho, test karwaoge tabhi toh samay se ilaaj hoga. Mere padosi ne samay par test kiya toh woh nirnay le paye, kab tak ghar par ilaaj karna hai, kab hospital ki zarurat hai. Agar test nahi kiya hota toh bimari ko samajh hi nahi pate. Woh govt centre aur aspatal gaye par sirf jab zarurat thi toh

zyada kharcha bhi nahi hua aur unka itne acche se dhyan bhi rakha gaya wahan. Didi, test karwaiye aur jaldi thik ho jaiye, apne liye, bacchon ke liye, apne pota poti ke liye."

Building relevance for barrier of fear of hospital and isolation in quarantine centre

Conveyed through trusted family member

Testing Journey: Behavioural Guidelines

The test result and not symptoms or potential contact defines current and future behaviours, and test results are associated with high intensity emotions. Thus, touch points at the time of testing are being leveraged to guide behaviours related to testing from sample collection to future need of testing.

A positive test result causes concern and is associated with a loss of control. SMS and test reports are being leveraged to build ability to cope with the positive result for self and its implications on family.

A negative test result leads to complacency and overconfidence, and is associated with being COVID negative for an undefined period of time. SMSs and test reports are being leveraged to ensure individuals continue to be vigilant and test again when necessary.

Target Group



Individuals getting tested and their social circles who hear about the experience

Channel



Attachments to test reports (test represented here is RT-PCR)

SMS on sample collection
 SMS on negative report
 SMS on positive report

Testing Journey: Behavioural Guidelines - SMS

The SMSs sent at each stage of the testing experience are being leveraged to communicate appropriate actions in a manner that is aligned to goals determined by the status of COVID result.

SMS on sample collection

Communicate guideline for testing through a medical expert

Provide reasoning for isolation which holds relevance to them personally

(नाम) का RT-PCR सैम्पल (तारीख, समय) को लिया गया था। अच्छा किया जो आपने कोविड-19 का टेस्ट करवाने का निर्णय लिया। जब तक इस टेस्ट का नतीजा ना आ जाए, डॉक्टर की सलाह है की आप आराम करें और अलग कमरे में रहें। डॉक्टर ये इसलिए कहते हैं की अगर आप को कोविड-19 हुआ हो तो अलग रहने से दूसरों को फैलने की सम्भावना कम से कम रख सकें। आप के परिवार की सुरक्षा आप के हाथ में है। अगर आप के घर के किसी और सदस्य को लक्षण हो या आएँ तो उनका भी तुरंत टेस्ट करवाएँ।

Drive decision confidence through appreciation

Communicate when other members of the household need testing

SMS on negative report

Provide clear directions on when the test would need to be repeated

(नाम) का RT-PCR सैम्पल (तारीख, समय) को लिया गया था जिसका नतीजा नेगेटिव आया है। जाँच करवाने के लिए, अपने परिवार की कोविड से सुरक्षा पर ध्यान देने के लिए, धन्यवाद। अगर आप के लक्षण ना जाए, नए लक्षण दिखे या परिवार के किसी और सदस्य को लक्षण हो तो दोबारा टेस्ट करवाएँ। याद रखें मास्क पहन्ना, हाथ धोते रहना और 2 गज की दूरी बनाए रखना ज़रूरी है।

Indicate getting tested as an action of protecting their family

Reiterate Covid Appropriate Behaviour (CAB) to counter complacency after a negative result

Testing Journey: Behavioural Guidelines - SMS

The SMSs on positive report are sent in two different messages. There needs to be a time gap between the two.

First SMS on positive report

(नाम) का RT-PCR सैम्पल (तारीख, समय) को लिया गया था जिसका नतीजा पॉज़िटिव आया है। हम समझते हैं कि ये कठिन समय है, चिंता ना करें, किसी भी मदद के लिए XXXX पर कॉल करें।

Acknowledge the fear being experienced and provide an actionable way to manage it

Second SMS on positive report

Divide the SMS sent for a positive report into 2 parts with a time gap in between as individuals are unlikely to assimilate the information right after a positive result

ज्यादातर लोग घर पे आइसलेट कर के ही ठीक हो जाते हैं। 14 दिन तक, किसी से ना मिले, अपने घर के सदस्यों से दूरी बनाए रखें और अलग कमरे में रहें। घर के सभी सदस्यों का जल्द से जल्द टेस्ट करवाएँ ताकि ज़रूरत होने पर इलाज शुरू हो सके। अगर आपके या किसी सदस्य के लक्षण गम्भीर होने लगे या आप घर पर आइसोलेट नहि कर सकें तो पास के अस्पताल या क्वॉरंटीन सेंटर जाएँ। वहाँ आप की अच्छी तरह देखभाल की जाएगी।

Use social proof to alleviate their concerns around recovery

Cue testing for other members of the household along with benefit of testing

Provide descriptive and specific instructions on isolation

Clear instruction on when home isolation is insufficient along with portrayal of centres and hospitals as an environment of care

Testing Journey: Behavioural Guidelines - Report

The front page of the positive report attachment is to provide specific actions to be taken.

Acknowledge the fear being experienced and provide an actionable way to manage it

Build coping through clear actions to be done

Visually support with realistic illustrations for better comprehension

Build reassurance of recovery

हम समझते हैं कि ये कठिन समय है पर चिंता ना करें, आप XXX पर मदद के लिए कॉल कर सकते हैं।

अपनी सेहत का ध्यान रखने और अपने परिवार को सुरक्षित रखने के लिए, नीचे दिए कार्य करें

1.



14 दिन तक आइसोलेट करें, अलग कमरे में रहें और किसी से ना मिलें।

2.



यदि आप के लक्षण गम्भीर होने लगें या आप घर पर आइसोलेट नहीं कर सकते, पास के क्वॉरंटीन सेंटर या अस्पताल जाएँ। वहाँ आप की अच्छी तरह देखभाल की जाएगी।

3.



घर के सभी सदस्यों का जल्द से जल्द टेस्ट करवाएँ ताकि ज़रूरत होने पर उनका इलाज हो सके।

4.



यदि किसी कारण आप किसी के सम्पर्क में आएँ, मास्क ज़रूर पहने, दूरी बनाए रखें और हाथ धोते या सैनिटाइज़ करते रहें।

आज (name of state/district) में इतने प्रतिषद लोग ठीक हो गए हैं।

**Front Page of
Positive Report
Attachment**

Use descriptive and specific instructions on isolation

Address negative sentiment towards quarantine centres and hospitals by communicating when it is required and assuring an environment of care

Cue testing for other members of the household along with benefit of testing

Communicate guidelines on CAB for a patient

Testing Journey: Behavioural Guidelines - Report

The back page of the positive report attachment uses relatable positive stories of recovery after COVID-19 and addresses specific barriers of Indifferent, Delaying and Denying categories as well as asymptomatic patients.

Acknowledge potential emotions and provide an actionable way to manage them

Build coping with positive result through relatable narratives

Indifferent barrier category story

Story of asymptomatic patient

Use photos of people like them for relatability or illustrate stories for better comprehension

Delaying barrier category story

Denying barrier category story

For Illustrative Purposes only.



क्योंकि मेरा खाना पीना अच्छा है और मेरी इम्युनिटी भी अच्छी है, तो जब मेरा कोविड का टेस्ट पॉजिटिव आया तो मुझे समझ ही नहीं आया की मुझे यह कैसे हो सकता है। मैं जानता था की अगर हुआ भी है तो अपने आप ठीक हो जाएगा पर परिवार को सुरक्षित रखने के लिए मैं क्वॉरंटीन हो गया और बाकी परिवार का टेस्ट करवाया। माँ का पोसिटिव आया और बाकी सब का नेगेटिव। माँ और मैं घर पर ही क्वॉरंटीन रहे, दवाई ली, ध्यान रखा और ठीक हो गए। अच्छा हुआ समय पर टेस्ट करवाया, पता चल गया तो सबका इलाज हो पाया और घर के अन्य सदस्यों को हमसे कोविड नहीं हुआ।



“मेरी सेहत अच्छी ही थी तो जब रिपोर्ट पॉजिटिव आई तो मुझे आश्चर्य हुआ। मुझे विश्वास ही नहीं हुआ की यह रिपोर्ट ठीक है। मैंने अपने डॉक्टर से पूछा कि यह कैसे हो सकता है। उन्होंने बताया की हर किसी को कोविड होने पर लक्षण महसूस हों यह जरूरी नहीं पर उनसे दूसरों को इन्फेक्शन हो सकता है, तुम सबसे अलग कमरे में रहो और सबका टेस्ट कराओ। दादी का पॉजिटिव आया, उन्हें कुछ दिन में लक्षण भी आए। अच्छा हुआ मैंने रिपोर्ट को गलत समझ के नज़रंदाज़ नहीं किया वरना हम दादी के लक्षण को मामूली फ़्लू मान लेते।



“टेस्ट पॉजिटिव आया तो मैं बहुत परेशान थी। घर, बच्चे, काम, कौन सम्भलेगा ये सब! पर अब सोचती हूँ की नहि करवाया होता टेस्ट तो और भी ज्यादा परेशानी होती, कितना कुछ गलत हो सकता था। करवा लिया तो परिवार और पड़ोसियों के मदद से क्वॉरंटीन के 14 दिन तो आराम से ही निकल गए और अब पूरा परिवार स्वस्थ और खुश हैं।”



“मेरे पास घर पर क्वॉरंटीन करने की जगह नहि थी। जब रिपोर्ट पॉजिटिव आइ तो मैं परेशान थी की गवर्नमेंट क्वॉरंटीन सेंटर में कैसे रहूँगी। पर अब मैं सब को बताती हूँ, वहाँ का मेरा अनुभव इतना अच्छा था, सेंटर इतना साफ था, हमारी देखभाल इतनी अच्छे से की गयी।”

Highlight benefit for testing for family's safety

Highlighting benefit of taking test and clarifying asymptomatic disease context

Highlight manageability of disease as benefit of testing early

Build assurance of recovery and highlight positive experience of institutional quarantine

**Back Page of
Positive Report
Attachment 25**

Testing Journey: Behavioural Guidelines - Report

The front page of the negative report attachment is to ensure the individual gets tested again when needed and continues to follow CAB (Covid appropriate behaviour).*

Appreciate the decision to drive decision confidence and encourage repeat behavior

Counter complacency by communicating specific actions to be taken after negative test result

Visually support with realistic illustrations for better comprehension

अच्छा किया जो आपने टेस्ट कराया।

याद रखें की कोरोना से सुरक्षा अभी भी ज़रूरी है, नीचे दिए गए कार्य करें:

1.



यदि आप के लक्षण (खांसी, सर्दी, बुखार, थकान, गले में खराश, शरीर में दर्द, उल्टी, दस्त) ठीक ना हुए हो तो फिर से टेस्ट करवाएँ।

Communicate when a test needs to be repeated

2.



घर के किसी सदस्य को कोई लक्षण हो तो उनका टेस्ट करवाएँ।

Communicate when family members need to be tested

3.



मास्क पहने, 2 गज की दूरी बनाए रखें और नियमित रूप से हाथ धोते या सैनिटायज़ करते रहिए

Communicate importance of continued CAB

4.



टेस्ट कब करना चाहिए का निर्णय लेने के लिए, पीछे के पत्रे का इस्तमाल करें

Build capacity to determine the right time to test

Testing Journey: Behavioural Guidelines - Report

The back page of the negative test report attachment provides a tool to ascertain when to test in the future.

Counter complacency from negative result by leveraging self-image of someone who got a test and highlighting that a test may be needed again in future

Clear call to action indicating when to test

जिस तरह आपने इस बार टेस्ट कराया, ज़रूरत पड़ने पर फिर ज़रूर टेस्ट कराएँ

एक भी जवाब हाँ हो तो टेस्ट कराएँ



क्या घर का कोई सदस्य कोविड पॉज़िटिव है?

हाँ / नहीं



क्या कोई पड़ोसी कोविड पॉज़िटिव है?

हाँ / नहीं



क्या पिछले हफ़्ते में आपने ऐसे वियक्ति के साथ समय बिताया जो कोविड पॉज़िटिव था या बाद में कोविड पॉज़िटिव आया?

हाँ / नहीं



क्या पिछले हफ़्ते में आप के साथ काम करने वाला कोई व्यक्ति कोविड पॉज़िटिव आया है?

हाँ / नहीं



क्या पिछले 5 दिनों से आप को खांसी, सर्दी, बुखार, थकान, गले में खराश, शरीर में दर्द, दस्त या उल्टी में से एक भी तकलीफ़ हुई है?

हाँ / नहीं



क्या आप को स्वाद या गंध आना बंद हो गया है?

हाँ / नहीं



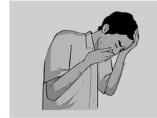
क्या आपने पिछले हफ़्ते में भरो हूई बस/ट्रेन में लंबी यात्रा की है?

हाँ / नहीं



क्या आप पिछले हफ़्ते में किसी शादी / सभा / अंतिम संस्कार में गए जहाँ 50 से ज़्यादा लोग आए?

हाँ / नहीं



क्या पिछले 5 दिनों से घर के किसी सदस्य को खांसी, सर्दी, बुखार, थकान, गले में खराश, शरीर में दर्द, दस्त या उल्टी में से एक भी तकलीफ़ हुई है?

हाँ / नहीं



क्या घर के सदस्य को स्वाद या गंध आना बंद हो गया है?

हाँ / नहीं

आपने पहले टेस्ट किया था,
एक भी हाँ हो तो इस बार भी टेस्ट करें

Leverage self-image of someone who has gotten a test to cue testing again

Disclaimer to reiterate the function of the tool

ध्यान दें: ये पर्वी डॉक्टर नहीं है और बीमारी की पहचान नहीं कर सकती है, ये सिर्फ़ टेस्ट करने या नहीं का निर्णय लेने में सहायता करेगा। कोविड-19 एक नई बीमर है और हम तेज़ इसके बारे में कुछ नया सीख रहे हैं। अगर आपको कोई भी शंका हो तो डॉक्टर से सलाह अवशिया लें।

For Illustrative Purposes only.

Other Critical Interventions

Improving Institutional Quarantine Experience

Individuals are wary of being alone and away from loved ones when ill, institutional quarantine is perceived as a punishment. Therefore, there is a need to position institutional quarantine as a recovery venue.



What we need to do

Plan the experience of institutional quarantine from entry to exit



Desired Behavior

Positive perceptions around the experience of institutional quarantine



How we do it

At the time of admission, the COVID positive patients can be given a plan which helps in what to expect, and communicates that they will be well taken care of. This could include the number of days of admission, schedule for doctor visits, potential interactions with families, other recreational activities etc.

Providing avenues for sufficient human interactions on a daily basis.

Arranging for daily interaction sessions through tie-ups with external counselling facilities or community groups for the admitted patients.

Encouraging the individuals in quarantine to share their positive experiences with their family members and acquaintances.



Target Group + Most Relevant Behaviour Category

Everyone

Denying Testing



Behavioural Levers

- Increasing the sense of control patients have while entering an unfamiliar area.
- Making positive experiences salient



System dependencies

- Changes in existing set up

Medical Store Recommendation

For individuals living in the community, these stores become the first touch point in case of any illness. They are trusted and individuals seek them for advice and next steps. These can be leveraged to recommend testing at the right time.



What we need to do

Getting buy-in from these establishments (Dispensaries, local medicine shops) and Build capacity to influence and recommend testing for COVID



Desired Outcome

Getting local medical shop owners to act as champions and suggest testing to locals



How we do it

Build relevance for testing for dispensaries, local medicine shops

Acknowledging the important role they can play in managing how ill people get and how many lives are lost

Acknowledging the trust the community places in them and their duty/responsibility towards them

Building capacity to influence communities

Tools for supporting their interactions with patients and suggesting when they need to recommend testing. It could include:

- Use a heuristic of medicine type to suggest a need for testing
- Details of where and when to get the test
- Tips on how to manage any concerns and highlighting benefits

A regularly updated and common channel of information having the number of negative / positive tests in the area. Collaborating with the testing facilities to set up testing booths outside the medical stores



Target Group + Most Relevant Behaviour Category

Everyone

All segments - Denying, Delaying, Indifferent, Opposed



Behavioural Levers

- Leveraging self image of community leaders
- Leveraging trust
- Using authority heuristic
- Familiarity bias



System dependencies

- Logistics of reaching out to local medical shops and dispensaries
- Setting up testing booths outside the medical stores.
- Creation of a common channel of information for latest number of positive/negative results

Caregiver tool-kit

Individuals are nervous about consequences of a positive test result. Transferring the onus to the caregiver could help in driving the testing behaviour. Therefore, there is a need to support the caregivers.



What we need to do

Create a Tool-kit to help caregivers monitor, act and manage a COVID positive member in the family



Desired Behavior

Enable a family member/caregiver take control and get the members tested for COVID



How we do it

Communicating the role and responsibility of the caregivers to ensure safety of all in the family. - *It is your responsibility to take care of your family.*

Safeguarding members of the family with a 3 step process:

Monitor: Providing a tool to determine when to get tested that can be used for self evaluation as well as for other family members by observations or by asking questions regarding their health/symptoms.

Act: Putting the onus of the decision on the caregiver rather than the at-risk family member and directing action, book a slot vs deliberative thought. Explaining early test means it will be easier to treat and advising home isolation post testing before results

Introduce easier methods of testing such as home collection / community testing /self testing as options for them to reduce the fear associated with testing centers.

Plan: Empowering caregiver with information on positive result by providing decision guide for home quarantine, institutional quarantine or hospitalization (include details of the financial support available for treatment).



Target Group + Most Relevant Behaviour Category

For caregivers

Denying Testing



Behavioural Levers

- Building coping for caregivers
- Driving onus from self to other
- Reframing question to drive action
- Help caregiver cope with anticipated consequences



System dependencies

- Updating the information based on peak and non peak

Appendix - Process and Insights

Project Phases

Phases

Stakeholder
immersion

Remote
Research with
Users and
FLWs

Synthesis of
data for
COVID-19
Testing Uptake

Insights on
Barriers to
COVID-19
Testing Uptake

Synthesis of
data for
COVID-19
Vaccine Uptake

Insights on
Barriers to
COVID-19
Vaccine Uptake

Intervention
Development




Rapid testing of
Interventions

Final share out




Research sample

Both testing and vaccination themes were explored with the entire sample.



	Barriers to Testing
	Barriers to Vaccination
	Vaccinated once - low intent for second



	Barriers to Testing
	Barriers to Vaccination
	Vaccinated once - low intent for second

18-29		30-59		60 and above		FLW
Nagpur Urban	Nagpur Rural	Nagpur Urban	Nagpur Rural	Nagpur Urban	Nagpur Rural	
2	1	2	2	2	1	+3
1	1	1		1	1	
			1	1		

18-29		30-59		60 and above		FLW
Bathinda Urban	Faridkot Rural	Bathinda Urban	Faridkot Rural	Bathinda Urban	Faridkot Rural	
2	1	1	2	2	2	+4
1	1	1	1		1	
		1			1	

Rapid Testing Sample



Asha workers / CHWs	2
Vaccination Staff	2
Informal Doctor	1
Panchayat / Local leaders	2
Liaison between the govt and community	4
Barriers to testing	6
Barriers to vaccine	4
Vaccinated once	2

COVID is more than a disease.

It is associated with economic hardships, enforcement of law, political propaganda and reduced social interactions.

Implications on Testing

Testing for COVID 19 is more than a medical decision

- Prolonged lockdown has led to economic hardships, therefore people need to make tradeoffs between risk of COVID infection and risk of starvation. The quarantine period is perceived as an additional economic distress.
- Compliance to lockdown and testing being regulated by the police leads to associations with law enforcement.
- Owing to the trust deficit towards the government, COVID is perceived to be a political propaganda to control people, this belief is further exacerbated in the context of the farmers protest.
- Measures to prevent contracting the disease have led to people being distanced and asked to keep away which may create a feeling of being disrespected and isolated.

COVID has multiple, distinct, dynamic contexts.

Lockdown, Post Lockdown, Vaccine Roll out and Lockdown 2.

Implications on Testing

Testing behaviours varies across contexts, based on the risk perceived, anticipated negative consequences and the individuals' perceived ability to cope

- The perceived risk associated with COVID changes with the changing contexts of the caseload, casualties due to infection, recovery rate, impacted populations and government restrictions.
- Anticipated consequences of testing (getting a positive or negative result) as a well as consequences of testing positive in various contexts, institutional isolation vs home isolation vs need for hospitalisation
- Compliance measures, perceived control over the disease (severity, treatability), ability to cope with disease varies across contexts, impacting individuals choice of mitigation strategies - home remedies vs medicines vs doctors vs testing

COVID-19 disease is perceived as unreal and unfamiliar but with familiar flu like symptoms

In an attempt to make sense of it, individuals create their own narratives which drive their testing behaviours.

Implications on Testing

Symptoms that are familiar and have often been experienced in the past are now being labelled as a new disease which is continuously changing, highly infectious, could be asymptomatic or could be fatal and has led to dramatic changes in all aspects of life. The inability to make sense, creates a sense of dissonance within individuals which leads them to seek out a narrative.

- Individuals rely on existing disease mental models of testing for symptoms and testing on prescription by doctor.
- Individuals fall back on their old methods for managing or treating the symptoms.
- Individuals do not associate the disease with contact with a positive person to the same extent as presence of symptoms.

Testing is a gray area

There is ambiguity around why and when to take a COVID test

Implications on Testing

The criteria for a COVID test is vague and open to rationalisation

- The changing communication on testing and lack of clarity provides the space for “reinterpretation” and “rationalization” on when to test and when not to test
- The “reinterpreted and rationalised” COVID-19 testing criteria leads to low test uptake:
 - Familiar flu symptoms are rationalized for common flu, unusual symptom, longer duration than normal cold and flu, with greater intensity or all occurring together are associate with COVID-19 and lead to consideration of testing
 - As contact with a COVID positive stranger (not from HH) is “invisible”, they rationalise the need for symptoms to consider testing.
 - Contact within family is considered only after a positive result and judged based on physical closeness to member, and symptoms for others to consider testing.
- However, there is no ambiguity around the mandatory testing as it is goal congruent.

Understanding the negative behaviours towards testing

- **Non-optimal internalized risk** informed by the current caseload, casualties due to infection, recovery rate, known impacted populations and existing government restrictions.
- Accounting for **anticipated negative consequences** of a positive test result on various aspects of life such as job, household, financial burden etc.
- **Inadequate ability to cope** with the symptoms, testing positive and the disease context.

Behaviour categories

We see 4 categories of behaviours with respect to people not taking the COVID test, ranging from delay to rejection of the COVID-19 test.

Opposed to testing



COVID is like a normal flu, we all have had these symptoms in life, no one dies of these things

View test as a mechanism to control

Indifferent to testing



Recognize the risk of COVID in general and to high risk family members but perceive low to no risk for self as they have strong immunity

View test as unnecessary

Delaying testing



Contracting COVID is a big concern which is dealt with by taking several steps to manage each aspect of it

View test as the last resort

Denying testing



Concerns around not being able to deal with a positive test result leads to complete avoidance of the chance of contracting COVID

View tests as too costly

Negative testing action tendency	Opposed to Testing 	Indifferent to testing 	Delaying testing 	Denying testing 
View test as	<p>View test as a mechanism to control COVID is like a normal flu, we all have had these symptoms in life, no one dies of these things</p>	<p>View test as unnecessary Recognize the risk of COVID in general and to high risk family members but perceive low to no risk for self as they have strong immunity</p>	<p>View test as last resort Contracting COVID is a big concern which is dealt with by taking several steps to manage each aspect of it</p>	<p>View tests as too costly Concerns around not being able to deal with a positive test result leads leads to complete avoidance of the chance of contracting COVID</p>
Emotion towards testing	<p>Skepticism</p>	<p>Overconfidence</p>	<p>Confusion</p>	<p>Dread</p>
Barrier themes	<ul style="list-style-type: none"> • COVID is associated with control, and law enforcement. COVID is a flu, therefore no risk internalization • Deep distrust in institutions, where the test results are (deliberately made) positive. Test as a means to suppress • Lack of trust in test results due to stories of dissonance between multiple tests • Their beliefs are reinforced by others around them who share these beliefs 	<ul style="list-style-type: none"> • Low risk internalization due to strong immunity • Follow only basic compliance measures for anticipated guilt of infecting high risk people in the household • Perceive no need for testing in the past, present or near future as they have immunity 	<ul style="list-style-type: none"> • High risk perception, living in the midst of high caseload and high death rate, risk managed through compliance • Testing positive is contradictory to their self perception as they are taking all the actions • The anticipated negative consequences of a positive test (income, household, others behaviour, infecting family) • Manage the anticipated negative consequences of a positive test result through (escalated) symptom management actions vs testing 	<ul style="list-style-type: none"> • Consider contracting COVID to be a burden, especially on the family, caregiving and financial • A test is equivalent to a COVID positive result and potential hospitalisation where they expect to lose their life • Low ability to manage home isolation and consider separation from family unfair • They have low perceived control over the illness and ability to manage it. Rationalizing symptoms to general ill health or old age, and deny the test.
Decision Levers	<p>Reduce distrust in the govt by removing perception of suppression and leverage their circle of trusted influencers to drive trust in testing system.</p> <p>Influencers: Community leaders, local chemists and community doctors</p>	<p>Drive risk internalization through updation of mental models and clarity on COVID-19 testing criteria. Build ability to cope with unexpected positive test results.</p> <p>Influencers: In-group members, vulnerable family members</p>	<p>Build urgency to test through leveraging self image of ‘compliant’ person, by creating a window of sufficient risk to test supported with an ability to manage a positive test result</p> <p>Influencers: Doctors</p>	<p>Build a perception of higher ability to cope in case of a positive test result and shift the onus of testing decision making to caregivers and other family members</p> <p>Influencers: Caregivers and other family members</p>



Opposed

COVID is perceived to be nothing more than a common flu and does not lead to deaths. Testing is viewed as a mechanism being used by government to control citizens.

Who is likely to have this behaviour?

Punjab: Males, both rural and urban (impacted by farmer protest and economic strain)

“I never believed in COVID, all of this is created by the government... the government is doing this to control and rule over us. If someone goes to the hospital they will not come back. They want to break us down mentally.”

-Rural, Punjab, 30-59 years

What is the COVID context?

This behaviour is seen among individuals who have deep distrust in the government due to the ongoing farmer protests and economic hardship combined with no internalised risk as a result of lower caseloads.

COVID is not seen as a disease to be prevented or treated but a conspiracy by the government, health system, and healthcare industry.

The conducting of tests by the police is perceived as forced testing, an act of law enforcement and means to control.

They have vague knowledge around testing types, processes and mostly associate it with forced testing by the police or mandatory testing.

What are individuals' beliefs?

COVID is a government conspiracy to control individuals as well as to get the farmers out of delhi by COVID testing.

COVID's second wave is merely to get people to take the vaccines.

COVID is a money making scheme for health systems which (deliberately) always give positive results, admit the patients for 14 days, bill large amounts and then kill them.

Dissonance in test results reinforce the lack of trust in the tests.

Their beliefs are reinforced by others around them who share these beliefs and the limited number of COVID positive patients in their region and personal networks.

What are the perceived consequences?

Individuals exhibiting this behaviour perceive implications of COVID and testing not only to self but to the community as a whole.

They expect that if tested, they would be given a false positive result and coerced into being admitted to a hospital where they would be killed. They question the accuracy of test results because of their belief that health systems deliberately make results positive and the dissonance of the same individual getting different results from different labs.

A negative test result is viewed as a license to move without being stopped by the police.



Opposed

Our whole village does not believe in covid. An announcement has been made in the village that if any COVID -19 team comes we will not let them enter. The announcements were done in the Gurudwara that the teams were not able to enter, so we don't let them enter at all."

Rural, Punjab, 60+ years

What are the actions taken or not taken?

These individuals consider themselves to have high control over the disease as it is nothing else but a common flu.

Everyday risk

Low compliance to safety measure. Focus more on alleviating the economic hardships due to lockdown. They wear a mask to avoid a fine rather than risk of contracting COVID.

Moments of heightened risk

On displaying symptoms:

- They treat symptoms through their usual ways of managing common ailments such as consuming over the counter medicines based on own knowledge or recommendations by chemists.

On contact with COVID positive:

- Given that they do not believe in COVID being anything more than a flu and do not know of many COVID positive individuals, there is no consideration or actions related to coming in contact with a COVID positive patient.

Mandatory Testing

Mandatory testing is engaged with if it is a choice to pursue individuals' own goals (like job placement, driving licence etc), they try and ensure a 'trusted' source for the test.

Forced testing by the police, done at street corners reinforces the narrative of being controlled - which are avoided, as the test result is expected to be 100% positive

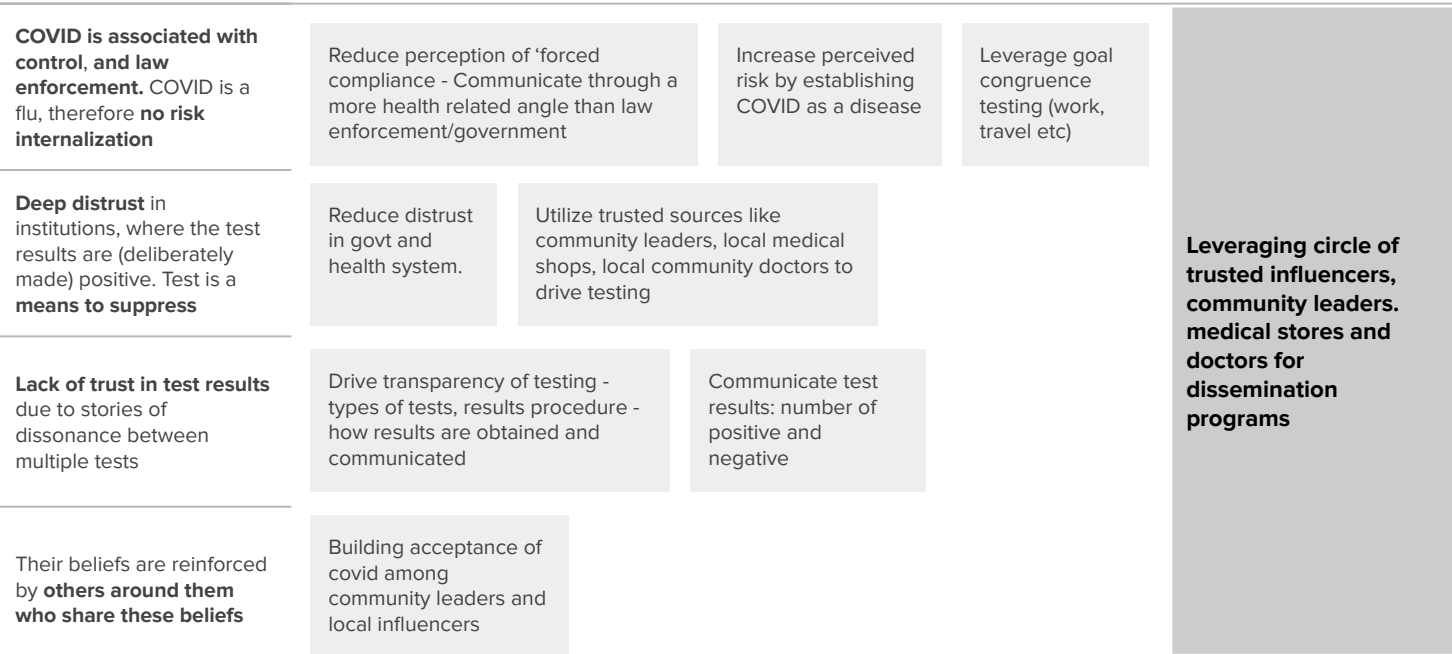


Opposed

What are the key barriers and how can they be addressed?

Reduce distrust in the govt by removing the perception of suppression and leverage their circle of trusted influencers to drive trust in testing system.

Influencers: Community leaders, local chemists and community doctors





Indifferent

Recognize the risk of COVID in general and to high risk family members but perceive low to no risk for self as they have strong immunity, testing is viewed as unnecessary

Who is likely to have this behaviour?

Punjab: younger age and middle age (high risk perception outside them)

“If a person's immunity power is good, he eats well his health remains well, if he does not eat well, drinks alcohol, then he falls ill, gets cold cough, fever, these are the symptoms of COVID, that's why during COVID someone with low immunity power catches these symptoms quickly”

- Rural, Maharashtra, 18-29 years

What is the COVID context?

This behaviour is seen among those who are cognizant of the mid-high and increasing caseloads, and severe forms of the disease among older groups of people.

They consider themselves to be at low to no risk owing to their age, strong immunity, lack of comorbidities, healthy diets and fitness practices. They perceive risk to others in the community and older members in their family because of their age and existing medical conditions.

What are individuals' beliefs?

Individuals exhibiting this behavior believe that people above 45 due to their existing ailments and young children as their immunity is not fully developed are the ones at risk of COVID. They believe that these groups are the ones who should get tested.

Immunity will save them from getting COVID

What are the perceived consequences?

There is a potential threat of being carriers and infecting elder family members in the household perceived to be at high risk.

This is associated with a feeling of anticipated guilt.



Indifferent

“COVID will end in 2-4 months, I don't stress about it much. Self safety is important because my mom is home. I am scared but not very scared (darr hai bhi aur nahi bhi).”

Rural, Punjab, 18-29 years

How are the situations managed by the individual?

These individuals take actions to manage risk not for themselves but for their families.

Everyday risk

They take calculated risks. They practice compliance behaviours to some extent but give themselves allowances.

Moments of heightened risk

They perceive no need for testing in the past, present or near future as they would not fall ill or be affected by COVID due to their strong immunity. Treat flu like symptoms as they would a general flu.

Contact with COVID positive

They speak of not being around COVID positive patients, and if they are their immunity will help keep them safe.



Indifferent

What are the key barriers and how can they be addressed?

Drive risk internalization through updation of mental models and clarity on COVID-19 testing criteria, communicate testing as a means to cope with heightened risk. Build ability to cope with unexpected positive test results.

Influencers: In-group members, vulnerable family members

Low risk internalization due to strong immunity

Drive risk internalization, update mental models regarding populations at risk of severe disease

Reframe what strong immunity is, how and to what extent it helps

Follow only basic compliance measures for anticipated guilt of infecting high risk people in the household

Updating what is perceived as risk of exposure and hence becoming carriers of disease for family members

Perceive **no need for testing** in the past, present or near future as they have immunity

Drive clarity of COVID-19 testing criteria

Leverage goal congruence testing and couple it with coping for an unexpected positive result

Communicating “strong immunity will help recover from the disease but does not prevent getting it or spreading it to family”



Delaying

Contracting COVID is a big concern which is dealt with by taking several steps to manage each aspect of it, testing is viewed as the last resort.

Who is likely to have this behaviour?

Maharashtra: working members of the family or with high responsibilities towards the family

“It is very common, there is a case in every house. A lot of people are having it, they are not telling others... but they are going out without masks, even if it’s serious. We have told everyone, don’t come close.”

- Urban, Maharashtra, 18-29 years

What is the COVID context?

This behavior is seen among individuals living in a context of high caseload and high death rate which is learnt about through news and social media as well as in their own personal network.

High risk perceived of oneself and family contracting COVID.

These individuals are well informed about the types of tests and the processes.

What are individuals’ beliefs?

Individuals exhibiting this behavior see themselves as taking all the actions needed to protect themselves and their families from COVID.

Testing positive is contradictory to their perception of self which contributes to their tendency to delay getting tested.

Due to the high rate of COVID around them, they believe taking a test will most often yield a positive result. While there are cases of dissonance between test results, it is attributed to novel nature of the disease, rather than trust in the test.

What are the perceived consequences?

The anticipated negative consequences of a positive test result considered during a COVID scare include the impact it would have on their income (breadwinners), on smooth functioning of the household (primary caretaker), on behaviour of others towards them (keeping away as they are positive) and anticipated guilt of infecting others in the family.

As a person is considered to be positive only with the positive result, this guilt is associated with testing and not prior to it.



Delaying

“I was a little unwell, not too unwell, only a little unwell, only had one symptom: I couldn't taste ... so I had to go to the doctor ...but you know how it is, even if you feel a little bit, you start feeling scared, will something happen to me? what if I have something? I didn't do a test and all, I didn't need to do a test”

Urban, Maharashtra,
30-59 years

What are the actions taken or not taken?

These individuals manage the perceived risk and anticipated negative consequences by favouring actions over inaction, these actions may or may not be conducive to desired testing behaviours.

Everyday risk

Manage the perceived risk on a day to day basis through compliance which is stated to be higher than practised and perceived to be ensuring almost negligible exposure which may not be true as they are still likely to get exposed through events considered safe (meeting specific individuals) or necessary (going to work).

Need for testing

Preemptively take actions to avoid the anticipated negative consequences of a positive test result.

On symptoms:

- a proactive approach to build immunity to ensure they do not contract COVID
- coping through rationalisations of symptoms being due to other causes such as exertion, change of weather, change in food habits etc.
- immediate treatment of symptoms through home remedies, and escalation of treatment as symptoms persists
- shifting decision making of interpretation of symptoms and need for testing to the doctor

On contact (outside home)

- contact with COVID positive (if known) is rationalized by testing on symptoms onset only

COVID positive family member

In case a member in the household tests positive, they try to manage health of family with limited testing.

- consume home remedies as precautionary measures for other family members
- treatment of other family members who show symptoms
- rationalise no need for testing for other members based on physical proximity with the positive family member within home
- only testing family members who show symptoms



Delaying

What are the key barriers and how can they be addressed?

Build urgency to test through leveraging self image of 'compliant' person, by creating a window of sufficient risk to test supported with an ability to manage a positive test result.

Influencers: Doctors

High risk perception, living in the midst of high caseload and high death rate, and manage the risk through **compliance**

Establish testing as a part of compliance measures to ensure safety

Testing positive is contradictory to their self **perception as they are taking all the actions**

Reinforce self image of 'responsible family member' or highly compliant individual

The **anticipated negative consequences of a positive test** (income, household, others towards them)

Build potential to cope with a positive result. - provide clarity around next steps on being tested positive (situations+how to manage+way to plan)

Manage the anticipated negative consequences of a positive test result through (escalation) symptom management actions vs. testing

(1) Create clarity on the optimal time for testing to (2) build urgency around testing and (3) testing done as an action to build control over the situation

Leverage doctors as source of influence at the time of decision making

Communication on testing being a compliance measure coupled with heuristics/scenarios enabling the decision on when to test



Denying

Concerns around not being able to deal with a positive test result leads to complete avoidance of the chance of contracting COVID, testing is seen as too costly

Who is likely to have this behaviour?

Maharashtra: older age group and middle age group with high financial burden

“Corona ke khauf ke maare bahut dare sehme hai log ... pehle ke jamane mein jaisa chua choot wala system tha, uss system jaisa ho gaya hai abhi ... pehle hum kahin gaye toh log pani aur puchte the..ab koi nahi puchta”

- Urban, Maharashtra, 60+ years

What is the COVID context?

This behavior is seen among individuals living in a context of high caseloads, death rate and shortage of medical supplies which is learnt about from news, neighbourhood and personal network as well as acute economic hardship.

Perceive high risk of getting a COVID positive test result for self.

They remain distanced from society as a precautionary measure for one of the two reasons:

- their health owing to their old age
- on being asked by authorities and employers to stay away

What are individuals' beliefs?

Two groups of individuals are seen to exhibit this behavior.

- The first group believes that they will die anyway, might not die from COVID but will die of starvation.
- The second group believes that given their old age, they are likely to die and would prefer to die in their homes with family.

They believe that every minor ailment is labelled as COVID and test results are always positive.

They believe that all those who admitted to hospitals for COVID, don't return. This is strengthened by the stories of others like them (friends and relatives) who have passed away after being admitted.

What are the perceived consequences?

A test is considered equivalent to a positive result which has many associated negative consequences.

- Their small living spaces do not allow for isolation as per guidelines. The alternative is to opt for institutional quarantine which would isolate them from loved ones and not be cared for properly. This is likened to punishment for a crime they have not committed.
- The treatment and hospitalisation would be an economic burden for their family which they are unlikely to be able to afford.
- They would be hospitalised where they would not be cared for properly and may lose their life like others they know.



Denying

“There is a BP medicine I have to take daily (coughs)..fever happens once you get old...it doesn't mean anything.. I have minor issues now and then.. Can't focus too much on health, we do manual labour...I have had cough for a month”

Urban, Maharashtra,
60+ years

What are the actions taken or not taken?

These individuals are unable to make complete sense of the disease and the information around it and rely on their limited understanding. They feel they have none or limited ability to manage the consequences of a positive test result, leading them to drive all their actions to avoid it.

Everyday risk

They either stay at home at all times or during high risk phases of COVID. High pressure from family member to stay safe.

Moments of heightened risk

On symptoms

- They rationalise symptoms as caused by change in weather, common or due to old age.
- They take actions to manage symptoms, not completely eradicate. This includes treatment through doctors until feeling better, treatment through ayurvedic medicines, use of home remedies
- Deny going to go to the doctor, rather self treat themselves

On contact

- They rationalise that they could not contract COVID through contact as they do not step out or only go for essential activities or work which involves limited interaction. Family members are not considered as a potential source of exposure.

Asked to get a test

- Refuse and focus on managing or rationalising the symptoms.

COVID positive family member

- They are kept away after a family member gets a positive result (positive only from the time of result)
- They rationalise that they are not at risk as they were not in physical proximity of the patient



Denying

What are the key barriers and how can they be addressed?

Build a perception of **higher ability to cope** in case of a positive test result and shift the onus of testing decision making to caregivers and other family members.

Influencers: Caregivers and other family members

Consider **contracting COVID to be a burden**, especially on the family, caregiving and financial

Stress early diagnosis to ensure lesser severity and burden, financially and on others

A **test is equivalent to a COVID positive result** and **potential hospitalisation** where they expect to lose their life

Shift the onus on others rather than self by enabling family members / caregivers to identify moments when to get tested

Low ability to manage home isolation and consider separation from family unfair

Manage stress from perceived consequences of testing positive by listing detailed next steps, providing ways to manage the disease at home

They **have low perceived control over the illness** and ability to manage it. **Rationalizing symptoms** to general ill health or old age, and deny the test.

Creating coping among caretakers for managing a positive case for older parents

Leveraging Influencers - other family members, caretakers to manage the situation

Establishing coping mechanisms to help them feel in control of the situation and communicate treatability of COVID

Strengthening caregivers/family members to be able to manage concerns, help them to cope with the disease itself and identify moments when they should get tested



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