People's perceptions about social distancing and perceived risk of acquiring COVID-19

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आरोग्य, ऊर्जा, शिक्षण आणि पालकत्व
या विषयांतील विशेष प्रयत्न

Prayas Health Group

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Prayas (Initiatives in Health, Energy, Learning and Parenthood) is a public charitable trust, which was registered in 1994. Prayas consists of four independent groups viz: Health, Energy, Resources and Livelihoods and Learning and Parenthood. Prayas Health Group (PHG) is committed to generate evidence-based discourse on emerging issues. PHG is actively involved in provision of clinical care to people living with HIV, programmatic interventions, socio-behavioral and epidemiological research, awareness building, and policy advocacy. (http://www.prayaspune.org/health/index.php)

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Background

An Infection, which started in Wuhan (China) in December 2019, in a few months has spread across the globe affecting millions of people. The Covid-19 pandemic has created an unprecedented humanitarian crisis globally. India reported the first confirmed case of the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) on 30 January 2020 in the state of Kerala. With the initial slow spread of the virus, it soon reached different parts of the country. Even before there were confirmed reports from different states about viral transmission, as a preventive step, on 24th of March 2020, a countrywide lockdown for 21 days was announced. The lockdown was later extended with different levels of restrictions. Even with these lockdowns, there has been a steady increase in COVID-19 cases in the country. However, the spread is geographically heterogeneous. Around 80% of the cases in the country are reported from five states and over 70% of the cases are reported from 10 cities. Maharashtra is one of the worst affected states, with Mumbai and Pune having higher number of cases compared to other districts.(MoH&FW)

Until the time treatment of preventive vaccine is available, 'social vaccine', which is adoption of preventive behaviors, is the only tool currently available to curb the spread of the virus. The virus is mainly transmitted through the droplets and to a smaller extent through fomites. The preventive practices for the general population include avoiding close physical contact with other people, avoiding gathering in groups and crowded places, use of masks, frequent hand washing, minimizing hand contact to nose, eyes and mouth and to seek appropriate health care when in need. Several studies and disease modelling exercises have shown that these non-pharmaceutical interventions are effective strategies to restrict the spread(MacIntyre & Chughtai, 2020; Singh et al., 2020). However, being behavioral interventions, the success depends on people's adoption of these practices and adherence to the prescribed norms. This could be challenging due to many reasons. Words such as lockdown and social distancing are commonplace, but have they become behavioral norm is a moot question.

It is argued that the period of lockdown is not only essential to reduce the sudden surge in the infection rates (the so-called flattening of curve), but also prepare the health systems to deal with the expected load (Alfano & Ercolano, 2020). Under the lockdown, people were advised to stay at home and go out only for essential services, such as accessing health care, getting groceries/medicines etc. However, despite regular advisories, educational campaigns, appeals, and enforcement by police, there have been incidents of many people violating the lockdown and non-compliance with personal preventive measures.

According to a media report on 9th May 2020, in Maharashtra more than 100,000 cases of lockdown violations have been registered by police.[1]

Why do some people strictly follow all the advisories and take precautions, while others don't? Literature on other diseases, including that on the H1N1 epidemic suggests that people's perception of risk of acquiring the disease significantly affects their behavior (Bults et al., 2011). People's assessment of risk is not uniform but can significantly differ in different groups. In other words, people, based on their life situation and life experiences construct risk. The way risk is communicated also shapes people's risk perceptions. For example, constantly focusing on death due to virus, equating it with 'war' etc. can amplify the risk for some people. This can increase fear among people and can motivate them to refrain from accessing apparently essential services including health care.

Now that the un-locking or the mission to 'begin again' has started, it is even more important to examine how people perceive the risk and if they feel that they can take necessary preventive actions outside the 'closed and safe spaces' of their homes. In this phase of going beyond stringent enforcement, the reduction in transmission would be determined by how well people understand the risk, how motivated they are to adopt preventive measures and to seek appropriate health care when in need.

With this background, a mix method study was initiated to understand, how do people from different socio-economic background perceive social distancing; what are the reasons for not adhering to social distancing / personal hygiene measures and violating lockdown norms; what do people think about their abilities to adhere to the norms of social distancing irrespective of the lock down; and what is the level of perceived risk of transmission and which activities of daily living are perceived most risky.

This research was motivated by the need to understand people's experiences and perceptions so that appropriate communication strategies and policies can be adopted while dealing with the pandemic. Given the population size, density, and level of health literacy in India, there is a need for such contextually appropriate strategies to ensure that people understand and adopt preventive strategies.

Methods

A rapid qualitative assessment was conducted in Pune city. Data was collected mainly through in-depth telephonic interviews. A verbal consent was taken on the phone. Only one interview with police personnel was conducted in person without violating the norms of lockdown and by following all the rules of social distancing. Additionally, an online survey was conducted to understand people's risk perception. The Independent Ethics Committee of Prayas approved the study.

[1] https://timesofindia.indiatimes.com/city/pune/over-1-lakh-cases-of-lockdown-violations-registered-in-maharashtra/articleshow/75645371.cms

Being a rapid qualitative assessment, analysis involved steps like creating a template summary of each interview and consolidating summaries by participant types. Responses from the online survey were analyzed using descriptive statistics.

Total 34 interviews (15 men and 19 women) were conducted among people from diverse socio-economic backgrounds as well as from people who are involved in the provision of essential services such as doctor, police, community health worker, etc. All the participants were living in Pune city. Age of the participants ranged from 21 to 81 years. Most of the participants were from 25 to 45 years of age. Of the participants interviewed, 13 were living in slum areas, 6 were living in city centres (peth areas), 3 were in chawls and 12 were living in apartments. Two of the participants were tested positive for COVID-19 and were in isolation (one in government facility while other participant in private hospital). One of the participants was in home quarantine. The interviews were conducted from 9th May 2020 date till 28th May 2020.

The online survey was conducted from 22nd May to 28th May and was completed by 832 participants (47.4% women, 52.6% men and 0.48% other). The average age of the participants was 34 years. Twenty percent of the participants had education less than 12th standard and 40% of the participants were unmarried.

Details of the methodology along with the profile of the people who participated in qualitative interviews, as well as who completed the online survey is given as an annexure.

Data from qualitative and quantitative interviews were interpreted to derive different themes under which the results and interpretations are presented.

Overall the analytical approach in aligned with the constructionist approach and specifically socio-cognitive model of risk perception (Prati et al., 2011) where cognitive processes such as perceived likelihood of catching the infection, perceived severity, personal control and prevention efficacy along with affective responses are important determinant of risk perception and behavior. In line with the framework of social amplification of risk (Kasperson et al., 1988), studies have documented that perceived risk depends on how the threat is communicated and that the communication about threat passes through different stations, such as media, institutions, social groups where it either amplify or attenuate and thus affect risk perception and behavior

Like any qualitative and exploratory research, the findings of this research should not be interpreted to generalize them for population or to answer 'how many' questions. It is intended to provide a range of experiences around these thematic areas. Respondents from variable experiences provide in-depth as well as wide range of information that could be useful for planning.

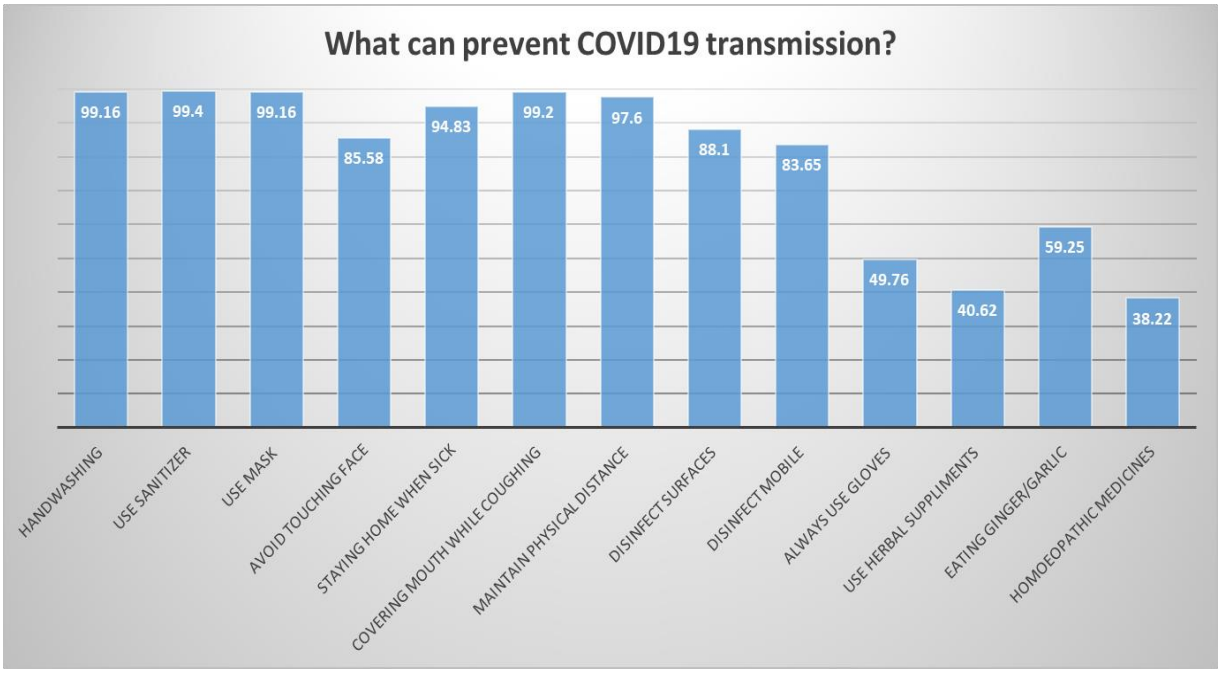
Findings

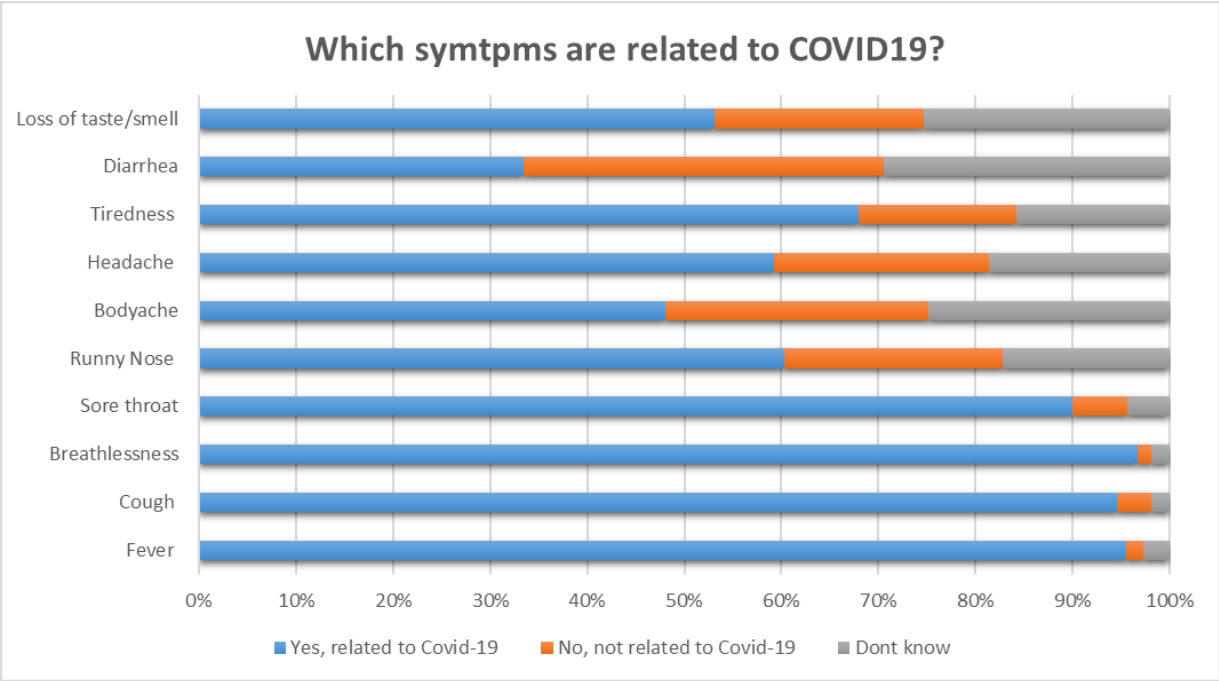
Theme 1: Information awareness and emotional responses

During the pandemic 'risk communication' or exchange of real time information, opinions and advice between experts and people who are facing threats is happening mainly through news channels and through social media. The objective of risk communication is to enable people who are at risk to take informed decisions to protect themselves and others. However, what is being communicated and how it is communicated (words, visuals, content) have different impacts on different people. Under this theme, we present what impact this risk communication/provision of information has on people.

1.1 People are aware of modes of transmission, symptoms and are adopting preventive measures

The information about how the disease is transmitted, what are the symptoms and how to prevent it seems to have well percolated among people. Most people know that they need to wash their hands, need to wear masks and use sanitizers. Of the 833 people completing the online survey, 26% feel that they have complete knowledge about the disease and another 65% feel that they have most of the knowledge about the disease.





The information also has reached people from different socioeconomic strata. For example, a participant who works as a waste picker mentioned that earlier few waste pickers were not using hand gloves or masks while collecting waste. However, because of this pandemic, all the waste pickers are using masks, hand gloves and sanitizers.

A 35-year-old housemaid said, "even at home we stay away from each other (keep distance). Only one person from our neighborhood goes out to bring vegetables and milk and that person brings for all. We wash all vegetables and milk bags before using. I have kept 3 kerchiefs for each member of my family to use as a mask. My son's classmates come to my house to go through their online classes because my husband has a smart phone and internet. I give them sanitizer on their hands. I make it mandatory for them to wear a mask and then I ask them to sit by skipping one tile (ek farshi sodun basayla sangte).

1.2 People are engaging in health promotion but there is a risk of going overboard

People are engaging in activities that they believe might prevent the infection.

1 Boosting immunity

2 Sanitation and disinfection

3 Personal protections

Activities for boosting immunity: These activities mostly include, taking home remedies (turmeric and milk, ginger, garlic, lemon), Ayurvedic decoctions (kadha's), Ayurvedic and Homoeopathic medicines, exercise, yoga, good diet etc. Sixty percent of the people surveyed believed that eating ginger and garlic would prevent COVID-19, while the proportion was 40% when it comes to taking homoeopathic medicines and other herbal substances.

While engaging in activities to boost immunity is certainly a good thing, it is important to ensure that people do not panic and overuse these or do not get a false sense of security.

One of the participants in the study, who is a teacher involved in conducting symptom-based surveillance mentioned, "I was eating ginger and garlic very regularly for 4 days. Since I had to go out for a survey, I was scared and was eating it in large quantities. Then I had a sore throat. I was terrified after that, thinking it was because of COVID-19. I could not sleep for the whole night. When I visited the doctor the next day and after he examined me, he told me that there are erosions in the throat and advised me to stop consuming ginger and garlic."

Sanitation and disinfection: With the information that the virus can be transmitted from surface to human and the resultant fear, people seem to have adopted several strategies to disinfect surfaces and objects. Some of the practices reported by the participants were, frequent use of hand sanitizer even when at home and having not gone out, ironing currency notes and exposing coins to steam after receiving them from customers, spraying disinfectant all over the buildings, spraying disinfectant on all the things brought in the home from outside (except vegetables, fruits and unpacked groceries) etc.

One of the participants working on a CNG refill station mentioned that they spray disinfectant on every vehicle and the person sitting in the vehicle from head to toe before allowing them to enter in the refill area. They also spray disinfectant on every employee before starting work.

A policeman reported that many of his colleagues sanitize chairs before sitting or many times they don't sit for hours to avoid contamination. They have to use a swipe machine for collecting fine and there is a lot of fear that they will catch the infection from swipe machines.

A participant working with CBO who was involved in distributing ration to poor and migrant people mentioned that the owner of the tempo who was helping them to transport ration was giving sanitizer liquid on each person's hand and then was asking everyone to put that hand on mask so that sanitizer percolates on the mask

An increasing incidence of reactions due to excessive use of soap or sanitizer as well as skin damage due to long duration use of gloves was seen in skin clinics.

Personal protection: Among the study participants, two of the front-line workers, one doctor and a teacher/surveillance worker narrated their experiences, which highlight the fear of contracting the infection.

A doctor, who runs a private clinic in an area defined as a containment zone, said, "When I am in the clinic I wear a N95 mask, on top of that wear another disposable mask and cover my face with a face shield."

A teacher involved in the survey said that when she is in the field, especially in the containment area during survey, she used to avoid drinking water or eating anything as to avoid removing the mask and touching the mouth or nose. The work would last for 4 hours and at times more as well.

1.3 Selective and sensationalized information has led to more fear of death, discrimination and misinformed expectation about 'treatment'

There has been a constant flow of information regarding COVID-19 through news channels as well as through social media. Though this information has been essential in educating people about modes of transmission, symptoms and the preventive measures, it has also led to a lot of fear about the disease. This information about preventive messages is being interpreted on the backdrop of constant coverage on deaths among people across the world.

An Experience of a woman who was tested for COVID-19 explains this fear clearly. She and many of her family members were tested positive

"We were scared for no reason. Media has painted such a dreadful image of this disease. All you visualize is oxygen cylinders, ventilators, and people dying. When I was leaving home to be admitted in the hospital (for isolation), I had this feeling that I would never be able to see my home again. I was very scared. However, when I went to the hospital, there was nothing of that sort…I think it is completely a mistake of the media. They show only the negative aspect of the disease. They should also show the positive side…show that people are getting better." [44-year-old woman]

The woman was kept in the hospital only under observation, as she did not have any symptoms that needed any specific treatment. However, because of this imagery of COVID-19 treatment, it was very frustrating and hard for her to believe that no one is feeling that sense of urgency to 'treat' her.

"All members of my family were positive for Covid-19. We went to a private hospital. They admitted all of us. Most of us did not have any symptoms…may be one of two had mild symptoms… They [in the hospital] used to give us hot meals and hot water to drink…that is it. No nurse or Doctor used to come to check us. They were not giving any medicines. There we ourselves used to change bedsheets and clothes. Our reports were normal".

The quote also reflects that communication about different stages of disease and when and what treatment is required has not been very effective.

Because of the daily bombarding of the information, especially about how many new cases are detected, how many people have died etc., some people have also said that they have stopped watching news channels.

Along with fear of contracting the disease there is tremendous fear of death in isolation. Many participants in the interview reported that. A sex worker when asked what she knows about the disease mentioned, which represents the feeling shared by many.

"Once you catch the disease then you die. No one is allowed to see your dead body. If you are positive then they will take you (to isolation facilities), and then there is no returning back"

Participants also expressed fear of being discriminated against in their neighborhood if they or someone from their family will get the infection. Stigma and fear of discrimination can significantly discourage people from disclosing their symptoms and get tested if required.

"If I get the infection, I will be there in the hospital and then who will feed my family. People will not allow us to live here", are the words by a participant who works as a waste picker that explain the fear of discrimination.

The fear of one becoming the reason for spread of the infection in the neighborhood was also evident from narratives.

A teacher said, "I have had many sleepless nights. Because I have to go out for work, I used to feel very scared that because of me the virus will come to my family and then in the society (residential apartment). If I get the infection, I can manage. But if others get from me then I feel very scared of how they would look at me"

Fear expressed by different participants are summarized in a table below.

Participant	*Quote describing fear of Covid 19*
General practitioner	*Patients are not convinced that they are suspected for Covid 19. They don't accept. As there is fear that if I get detected positive then they will quarantine me and my family. There is lack of awareness. It is not the case that every person detected with Covid 19 will die. Everyone doesn't need a ventilator. If I send them to Government facility, I am sure that they won't come to me again.*
A woman staying alone	*From my symptoms, I was sure that my report will come positive and if my brother and his wife come to know about it, they won't allow me to stay with them. I didn't want to go to the hospital, but because of worsening as symptoms I decided to go and admit in the hospital. I did not want to call an ambulance as everyone will come to know about it. I called my sister and some other relatives to take me to hospital but no one was ready. Finally, one of my friend dropped me to hospital on one condition that she would drop me outside the hospital as hospital staff will also quarantine her as she had come in contact with me.*
Police	*We have been told to take action if people are not following lockdown rules but we always feel very scared when we have to go close to people. There is risk for us. We don't know whether that person is having the infection or not. I am healthy so I will get cured but I fear that we will infect our families.* *We don't know for how much time this Corona will stay in air, on swipe machine, on chair, etc. Many of my colleagues sanitize chairs before sitting or many times they don't sit for hours to avoid contamination. We use a swipe machine for collecting fine and there is a lot of fear that we will catch the infection from swipe machines.*
Teacher involved in conducting symptom based survey	*I have had many sleepless nights. Because I have to go out for work, I used to feel very scared that because of me the virus will come to my family and then in the society (residential apartment). If I get the infection, I can manage. But if others get from me then I feel very scared of how they would look at me*
Participant admitted in Covid care Centre	*Due to fear person suffers from heart attack and dies on the spot. I have fear of death. I fear that reports of my family members will come positive. When I will go back in Vasti (slum), will people talk with me, will they come near me, how will they look at me. Already this news has spread in my Vasti.*

Waste picker	*If I get the infection, I will be there in the hospital and then who will feed my family, who will look after my children. People will not allow us to live here.*
Housemaid	*There is always fear that this virus will sit on my clothes when I go out to bring essentials. If I get infected will they allow me to stay in my home, what will happen if my family members get infected. People say that if the person get this infection then s/he dies. No one comes near you. No one touch you. Even after death no one comes to your funeral.* *My children are young. What will happen to them if I die?*
Sex worker	*There is no treatment to this disease. Once you catch the disease then you die. No one is allowed to see your dead body. If you are positive then they will take you (to isolation facilities), and then there is no returning back.* *I fear that we can't see Corona. If any customer comes and don't tell you if he is infected, then he will pass it to me.*
Vegetable seller	*Initially there was fear of death but now the fear is decreasing as we are listening to news that many people are getting cured and are being discharged from the hospital. There is fear but will have to go out and earn money otherwise how we are going to survive*
Researcher working in Mental health	*There is fear of infection and death. But now there is more fear about economic losses, loss of job, how to survive, etc.*
Housewife confirmed having Covid 19 and was admitted to private hospital	*We were scared for no reason. Media has painted such a dreadful image of this disease. All you visualize is oxygen cylinders, ventilators, and people dying. When I was leaving home to be admitted in the hospital (for isolation), I had this feeling that I would never be able to see my home again. I was very scared. However, when I went to the hospital, there was nothing of that sort…I think it is completely a mistake of the media. They show only the negative aspect of the disease. They should also show the positive side…show that people are getting better."*

Key messages

1	With a pandemic of this scale, deluge of information that changes rapidly, and overall low level of health literacy, it is important to expect that people will interpret information differently and use their own rationality while undertaking activities. While it may not be necessary to address all the practices people follow out of fear, it is important to identify if there are any practices that are harmful to the person or to others and address them.
2	People seem to have information about what is to be done and what should not be done. However, there is a clear need to explain to people the science and the logic behind these recommendations.
3	The transmission related concerns and fears of front-line workers should be addressed through regular trainings and feedback mechanisms. Research from other stigmatized diseases such as HIV suggest that people consider doctors, teachers (front line workers) as knowledgeable and hence fear based practices in these groups have significant impact on the community.
4	There is gap in communicating and processing information on different stages of disease and when treatment is required. Clear communication of disease stages need for treatment should be communicated to people.
5	People seem to have a very dreadful image of COVID-19 treatment. As the infection is expected to increase in coming days with the possibility of more people requiring treatment, it is important that the clear information about availability of services, hospital procedures, treatment protocols etc. be communicated to people to reduce their fear, anxiety and encourage them to seek care when needed.
6	In order to help people take actions that are well informed, there is a need to engage with people. While television and social media might still remain dominant sources of information to reach our majority of the people in short time, simultaneously different communities, specific groups can be reached through community based organizations, community leaders, health care providers, frontline workers to address additional and specific concerns that these communities might have. The preventive and other messages that are provided should also consider explaining to people why a particular preventive strategy is suggested so that they understand the logic behind it. Targeted training sessions can be arranged to guide people to follow preventive measures as they start resuming daily tasks (offices, businesses, service provisions, etc.) by CBOs, IT industries, private companies, etc. There is also need for training and sensitization of local administrators starting from office bearers of residential apartments to Panchayats.

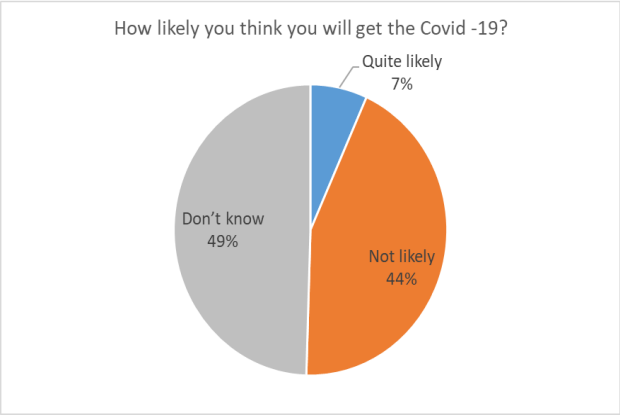
Theme 2: Risk perception and social distancing

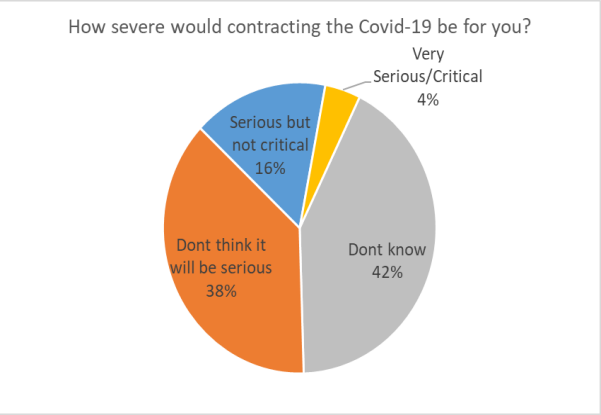
Understanding how people interpret risk and how they choose preventive behaviors based on their understanding is important for managing the spread of the disease. In this section, we describe people's risk perception, what affects it and its relation to following social distancing norms.

2.1 Uncertainty and denial of perceived risk can lead to fatalistic attitude and false sense of security

Constant information and fear about the disease can increase uncertainty about the events and hinder people's risk perception. In the survey, almost half of the people said that they do not know what the likelihood of them catching the infection is. Despite of the widespread fear about the disease, almost half of the people do not perceive themselves at risk. While women and young people (less than 35 years) were less likely to perceive themselves at risk, a higher proportion of people who were providing essential services perceived themselves at risk. The proportions of people saying that they do not perceive themselves at risk were similar across education categories.

"They (young adults in the area who roam around and are not following lockdown rules) think that they can't get the infection. There are no patients in our area. Therefore, they just sit in groups for the whole day and when a police van comes, they just run to their homes. Some of them do not even wear masks and some wear them just for 'show'. Their masks many times lie around their necks and not cover their mouths."





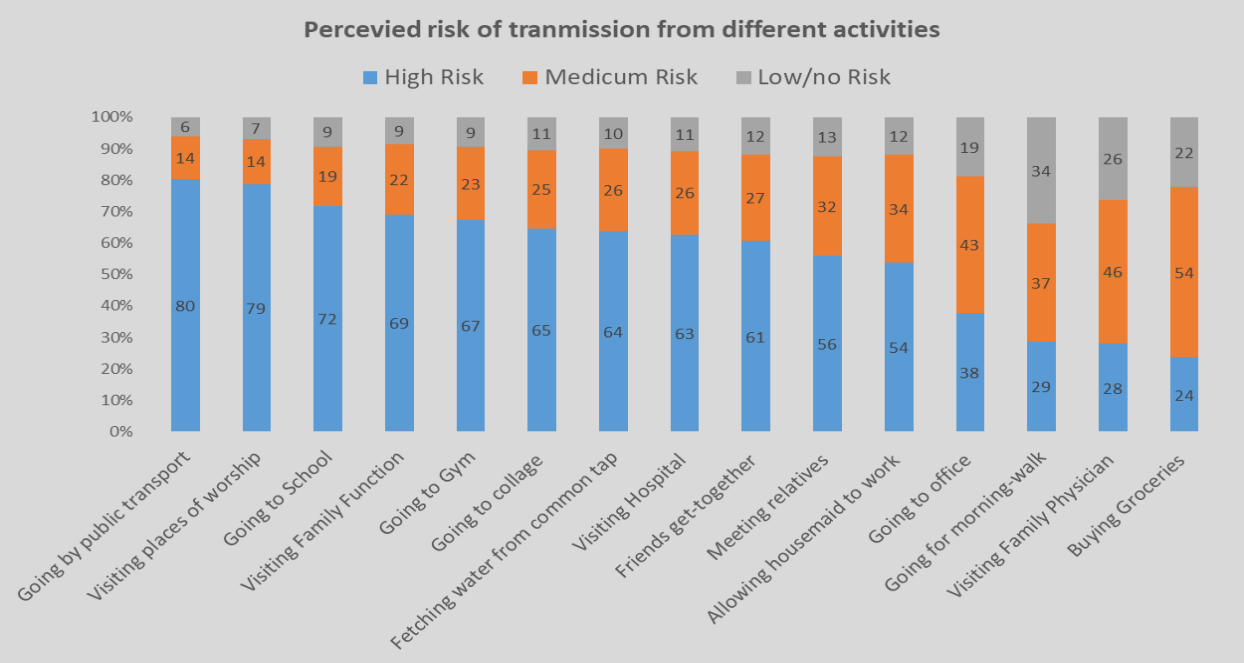
Higher proportion of older people (>50 years) said that they are not likely to contract the infection compared to younger people (35-50 years) [49% vs 34%]. This is also true for perceived severity of the disease where a higher proportion of older people perceive that they will not have severe/critical illness if they contract the infection (52% vs 44%).

Few participants also mentioned that people think that they will never get the infection; God will save them.

An 81 year old woman who lives alone mentioned, "do not feel any risk. Doesn't matter if I get infected (zhala tar zhala). I generally do not get scared. I have never hurt anyone. I have never done anything wrong. I believe that if I have not done anything wrong with anyone I won't catch this infection. My God will save me from this".

2.2 Familiarity affects risk perception

There are significant variations in the perceived risk associated with different activities. Overall, places where there is possibility of crowding are perceived as of high risk. In addition, it is important to note that going to a family physician is perceived less risky than going to a hospital (irrespective of the fact that the hospital is a designated COVID-19 hospital or not). The risk perception also seems to differ for activities, which might have a similar chance of acquiring disease based on the need and familiarity, for example going to office is perceived less risky than meeting relatives.



It appears that people's risk perception changes based on who they are interacting with and if they are using personal protection such as masks and gloves, irrespective of whether it is used properly or not (for example removing mask, spitting and using it again; or removing mask for some time while talking to avoid feeling of suffocation).

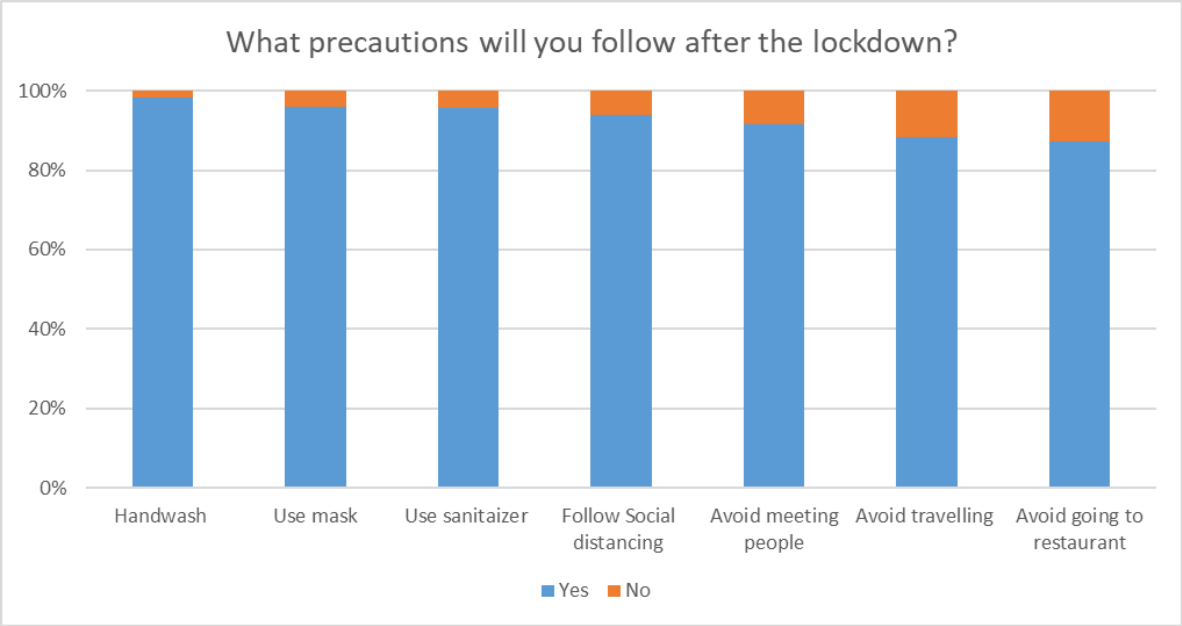
Many participants said that they do not feel there is any risk in going outside to bring groceries, vegetables as these places belong to their neighborhood, and they have known these vendors for a long time.

A young participant who was detected positive for COVID-19 told us, "I used to go out with my friends for an evening walk in our area. We used to get bored by sitting at home for the whole day. We never felt the need to maintain 6 feet physical distance between friends. We used to roam only for half an hour. Everyone took care. We used to wear masks. I knew all so there was no tension (no reason to perceive risk)"

2.3 Adherence to social distancing norms is often out of compulsion than personal motivation

Social distancing or keeping physical distance of at least 6 feet between two people is suggested as one of the strategies for breaking the chain of transmission. There were mixed reactions from the participants about following these norms. Most of them were of the opinion that mostly people are following the norms of social distancing. However, there are people who go out even during lockdown, mainly because they think that they are not at risk of acquiring the infection. If there is no case detected in that area, then people think that they are not at risk.

In the survey, when people were asked what precautions they would take after the lockdown is lifted even when there is no enforcement from the government then most of them mentioned that they will follow all the norms about social distancing and personal protection. However, qualitative interviews provide details about difficulties in following these norms. Many people said that maintaining distance from people is not possible, because either you have limited time to finish work or the space is limited. A 30-year-old man staying in a slum mentioned that it is not possible to avoid meeting relatives staying nearby as they go to each other's house for so many years and now if he tells them not to come to his house they will be angry with him. Participants staying in slum areas also mentioned fear of using common toilets or common taps for fetching water. Some people also reported that social distancing is followed only when they know that someone is watching them such as police.



One of the participant who sells vegetables mentioned

"I start my day at 2:30 AM. Because the market is closed, I have to go to a different market to sell the vegetables. I do retail as well wholesale. People do not follow social distancing in the morning till say 10:00 to 11:00 am…and I think it is also not possible…everybody is in such a rush, there is no time to think...but most people are covering their mouth with a kerchief, if not with the mask".

However, there were also narratives of strictly following lockdown and social distancing from the slum with high population density.

A 35-year-old woman working as a housemaid and living in a slum said

"We follow all the norms in our area. Everyone stays inside the home; people do not go close to each other. There is no entry for outsiders in the community. We have almost sealed the entrance of the community (Vasti). People have decided the timing to get vegetables...earlier it was only 10 to 11 now they have made it 10 to 2. The vegetable seller also will not give vegetables if you gather in a crowd. The grocery shops have also kept a table in front of the counter. They do not give you grocery in your hand. Put it on the table and then you should put the money there and pick your stuff. Same is at the medical shop."

Key messages

1	During the pandemic, risk communication is of utmost importance. Preparing people to take informed action would mean that they go beyond fear and assess their risk appropriately. When people minimize the risk or have fatalistic attitude, they are less likely to adopt preventive practices. During the lockdown, television and social media are major sources of risk communication.
2	Involving communities for communicating the risk and ensuring that people follow preventive norms is essential. Several approaches to involve communities can be explored such as encouraging those who recovered from COVID-19 to educate others in their neighborhood, involving community leaders, local influencers and involving community based organization. This communication should go beyond modes of transmission and preventive measures but should include communication about access to health, quarantine and isolation etc. which are important for shaping people's perception
3	Penalizing non-adherence to preventive measure such as mask use or social distancing is less likely to make any significant behavior change. Collective decisions made along with the community members with understanding of risk and feasibility of following it are likely to work

Theme 3: Perception and experience about quarantine and isolation

3.1 There is confusion about quarantine and isolation

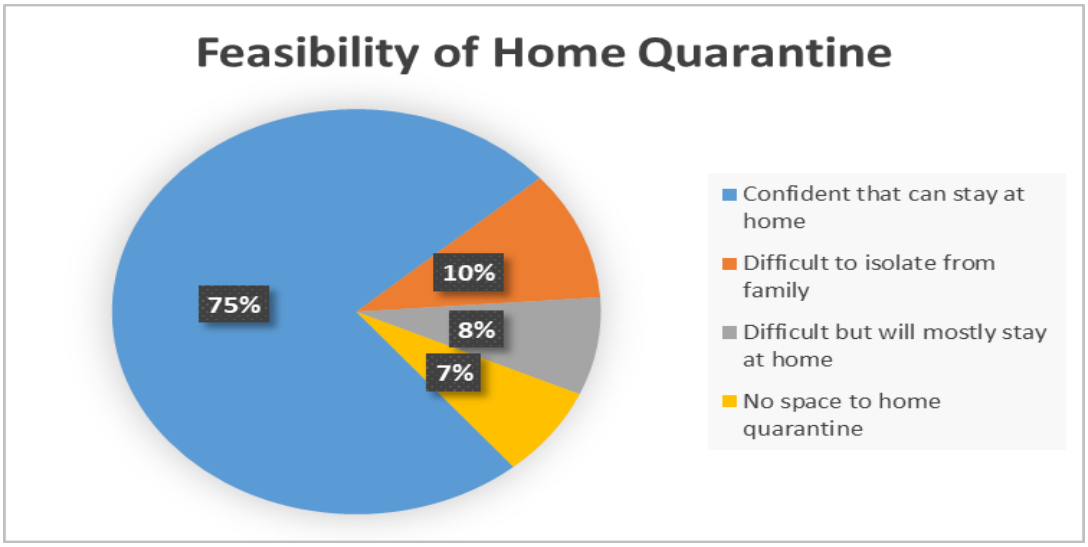
A 40-year-old local political leader when was asked what he understands by quarantine said, 'People are kept there after they get infected with Covid 19 so that they don't pass the infection to others through air'.

Most of the people have heard the quarantine word for the first time during COVID-19 pandemic. Though the word is specifically used to describe a process where people are kept separate, their movements are restricted to see if they develop symptoms. This is different from isolation where people who have the infection are separated from other people who do not have the infection to prevent the spread of the transmission.

However, it appears that most people do not understand the difference and consider quarantine as separation of people who are infected.

3.2 Home quarantine is perceived difficult even when there is space available

In the online survey, a question was asked, if they were advised by the health department to quarantine themselves at home for 14 days because of exposure to a patient with COVID-19, how difficult it would be for you to follow this?



Excluding those who said that they could not home quarantine because of unavailability of space, 80% of the people say that they are confident that they can stay at home. There

is no difference based on the gender, education or rural/urban residence in this response suggesting that availability of space in the home might be important determining factors for following home quarantine. Most people from lower socio-economic areas mentioned that home quarantine is not possible because of the limitation of the space. However, they said that if there is such a need (if they are detected positive) then to prevent others from catching the infection, they would be willing to go to an isolation facility.

Though the majority of people say that they would stay at home, they also acknowledge the difficulties of staying at home. People say that it will have an emotional impact on the person who is asked to stay separate at home (will feel bad, isolated).

One 32 years old woman who is a mother of 2 children said, "If I am isolated because I have the disease, I am sitting doing nothing and I see my children cooking/doing housework then I would feel very bad. (mula svaypak kartayat ani mi basaliye tar majhya manala tari vait vatelach na)... and this disease is not something that you can see (the symptoms) you just know that you have the disease…so I will definitely go and help them (in the housework). I think this disease cannot be treated at home. One has to be kept in the hospital".

There is gender difference in the answers given for the feasibility of the home quarantine. Most of the men responded by saying that if the situation arises it will be possible for them to home quarantine themselves if there is separate room in the house. However, women said that it is difficult to follow it even if there is separate room as they were more worried about the household work, who will take care of their children, etc.

A person who was home quarantined and took reasonable care during this period also said that it is not possible to take all the care he is advised. [the guidelines state that a mask should be used all the time]. One of the important aspects from his narrative is the lack of perceived need to follow all the measures for the entire duration when you do not get any symptoms.

"I stayed at home, it was not possible to follow all the precautions all the time. We used to sit together to eat (lunch, dinner). Otherwise, I used to be alone in the room for the rest of the time. I was not wearing a mask all the time, neither were the other people in the house. I was taking bath with hot water regularly. I was checking if I have a fever. I was eating healthy food. However, it was not possible to stay separate from family members all the time. I mean, if there is such a need I would do it, but I did not feel that it is required. I was healthy and did not have any symptoms" (24-Male)

Another aspect of home quarantine though did not come from the study participant but was reported to our counsellor was the issue of stigmatization and discrimination from the neighbors.

A 38-year-old businesswoman while speaking to our counsellor told,

"My husband was detected positive with COVID-19. There are nine people in my house including in-laws and children. Initially in-laws were not ready to admit my husband [in the hospital]. They thought if they contact government center, an ambulance will come, there would be big drama in the residential society. They were scared of what people in the society will say, will they allow us to stay in the society? After he had high fever, I admitted him in a private hospital. In Government hospital they only tested me and my report is awaited. They asked all of us to home quarantine. When we came back from the hospital everyone in the society were looking at us weirdly. They asked us how we came back in the society? there is risk to them and so don't stay here (ithe thambu naka). They also lodged a complaint in police station saying this family should not be home quarantined but should be sent to Government quarantine center. No one of us wanted to go to quarantine center. We requested them to allow us to stay in our home. We assured them that we won't come out of the home. We also suggested them that they can put lock from outside. However, they were not in a mood to listen. Now, police also have asked us to keep our luggage ready by tomorrow and they would shift us to a quarantine center."

3.2 There is a largely negative image of institutional quarantine

People are quarantined in institutions when home quarantine is not possible. In the qualitative interview, we asked people what comes to their mind when they think of quarantine facilities. It appeared that majority of people have a negative image of the facility.

One participant staying in slum whose friends were tested positive for Covid-19 when asked about how he imagines a quarantine center said,

"I have never been there but I think it must be like a closed separate room, where no one comes to meet you. You are not allowed to meet any relative. There would be only one bed, some water in the room and there won't be any other facilities like TV, internet".

People also seem to believe that in quarantine facilities, people who are infected and those who are exposed are 'kept together' and hence there is a possibility of catching the infection in the quarantine facility.

Another participant said, "the images of the way police take people to the quarantine centers feels like they are putting people in jail."

One of the participants who was involved in relief work with a slum community said that because of this negative perception about quarantine facilities people are not coming forward and delay treatment seeking even if they are having severe symptoms. There is tremendous fear that if they go to the government flu clinic doctor will quarantine them and their family. They insist their family physician or general practitioner to treat them and not to refer them to government facilities. People prefer to go to private facilities compared to Government facilities. However, people do not have money to go to private facilities and they are charging a lot in private.

Experiences of a participant currently living in a COVID care center: (22 years, Man)

I had fever and sore throat; I panicked and went to Government hospital for a check-up. They took a swab from my nose and sent for testing. I stayed there for a day. The next day report came and it was positive. At 11.30 in the night, they took me by ambulance. Initially I did not know where they were taking me but then I came to know the name of the place. Next day my relatives came to give me a bag of essential things and clothes. They were not allowed to come near me, there was a rope tied between us at a great distance. There was a lot of tension on the first day, I cried a lot. Here no one tells you anything, no one comes near you. Everything is from a distance.

In that hospital they asked me my address, with whom I was for last few days, my friends' names and contact numbers. Afterwards I came to know that one ambulance, a police van went there, and they took my friends and some others in an ambulance for the check-up. I was very tense. I was the first case of corona in my neighborhood. Friends started calling me. They told me that the news has spread like fire all over the Vasti (neighborhood) and everyone is talking about it. All of them were quite stressed. I thought it was all over now and now I am going to die. Even my family members would come positive. I was okay if anything happens to me, but I cannot imagine something happening to my family. I was also worried about how people will react to it, whether they will accept me or they will discriminate against me.

I had seen on TV channels, in news, when someone gets Corona infection then doctors put them on oxygen… they don't see their house again…they die. I have seen the pictures of the hospitals, doctors wearing all those clothes. I thought I was going to die now. I cried a lot. I was just crying.

All the rooms in the hospital I am staying are full of people with this disease. The next morning of my arrival to the hospital, I heard an announcement. People were going on ground floor in a line. I stopped one of them and asked him where they were going. He said they were leaving for their homes. It was glad to hear that. When I enquired a little more, he said here they do check-ups, give food, people gain weight, gain strength for 14 days and then before leaving they will do a check-up and send us home.

Seeing me scared, he said, don't be scared. I was relived after hearing that (Mazya atmyala shanti milali). Here every morning they call names on the loudspeakers and then all those whose names are on the list go down with the luggage. Everyone applauds by clapping to them. I feel good when I see this… One day my name will be mentioned and people will clap for me.

This narrative shows acceptance of quarantine among people and the need for information regarding quarantine so that fear goes away. If people are well informed about the process of quarantine and isolation then there would be better adherence and outcomes.

Key messages

1	People should be made aware about the difference in quarantine and isolation.
2	More transparent communication about the quarantine and isolation procedures should be communicated to people in order to reduce the fear in their minds.
3	In order to reduce the anxiety and confusion of people in quarantine and isolation facilities, they need to be made aware about the procedures at these facilities (dos and don'ts, testing protocols etc.). In order to prevent confusion, miscommunication and misinterpretation and to reduce human efforts, technology can be used such as pre-recorded videos.
4	It is important that the process of contact tracing and getting people to quarantine centers does not incite fear among people. Clear communication of the procedures, involving community members to build trust, sharing positive experiences of people who recovered from COVID-19 and those who have been quarantined, avoiding police as far as possible might be helpful strategies that can be thought of.
5	There is urgent need to provide psychosocial support and counselling to people in quarantine, isolation and those who are recovered from COVID-19. Strategies like providing information desk, counselling desk linked to COVID-19 care centers can be thought of.
6	Stigmatization and discrimination of people at residential apartments needs urgent attention. With increase in the epidemic more people are being kept in home quarantine, home isolation and more people who are recovered from COVID-19 are returning to their homes. Their experiences of stigmatization and discrimination needs better understanding to devise interventions to address it.

Summary and recommendations

- People have information about the modes of transmission of the disease and how to prevent it. There is extreme fear of contracting the disease as well as of death. However, to prevent the fear about the disease, people should be made aware of the logic behind recommending preventing measures.

- People seem to have a very dreadful image of COVID-19 treatment. As the infection is expected to increase in coming days with the possibility of more people requiring treatment, it is important that the clear information about availability of services, hospital procedures, treatment protocols etc. be communicated to people to reduce their fear, anxiety and encourage them to seek care when needed.

- In order to help people to take actions that are well informed, there is a need to engage with people. Several approaches to involve communities can be explored such as encouraging those who recovered from COVID-19 to educate others in their neighborhood, involving community leaders, local influencers and involving community based organization. This communication should go beyond modes of transmission and preventive measures but should include communication about access to health, quarantine and isolation etc. which are important for shaping people's perception

- In order to reduce the anxiety and confusion of people in quarantine and isolation facilities, they need to be made aware about the procedures at these facilities (dos and don'ts, testing protocols etc.). The potential of using technology (pre-recorded videos etc. can be explored for those in the facility.

- It is important that the process of contact tracing and getting people to quarantine centers does not incite fear among people. Clear communication of the procedures, involving community members to build trust, avoiding police as far as possible might be helpful strategies that can be thought of

- The transmission related concerns and fears of front line workers should be addressed through regular trainings and feedback mechanisms. Research from other stigmatized diseases such as HIV suggest that people consider doctors, teachers (front line workers) as knowledgeable and hence fear based practices in these groups have significant impact on the community.

- There is urgent need to provide psychosocial support and counselling to people in quarantine, isolation and those who are recovered from COVID-19

Annexure: Details of methodology

Qualitative interview: Study population

People living in Pune city and from diverse backgrounds based on their place of residence (slums, gated community, peth areas/inner city area with high population density, containment zone, etc.), occupation, socio economic status, educational background, gender, age, etc. were included in the study. People who are in charge of ensuring lockdown measures and those who are involved in provision of essential services were also included in the study. Following broad schematic categorization was used while selecting participants for the study

1. High risk group which included various frontline workers (Health care providers, police, sweepers, outreach workers involved in distributing ration from NGOs, CBOs, etc.) who are directly involved in providing services

2. Moderate risk group: People involved in providing essential services other than health services such as small vendors, grocery shop owners, housemaid, rickshaw/cab drivers, people working in banks, etc.

3. Vulnerable group: People living in slum area, people from marginalized community, sex worker, elderly people living alone, etc.

4. Influencer group: Religious leader, CBO leaders, local political leader, etc.

In-depth interviews were also conducted with people who were home/ institutional quarantined.

Data collection

Potential participants were contacted through our personal networks and organizations working for these different communities. Data was collected mainly through telephonic conversation. Data collection techniques included individual in-depth interviews. The interviews lasted for an average 20-30 minutes. Total 34 in-depth interviews were collected. The interviews were conducted in Marathi/Hindi/English as per the preferred language of participants. Data collection tool included, semi-structured interview guide.

After explaining the objectives and the process of the study to potential participants, their consent for participation was sought. Interviews were conducted at mutually convenient times. Telephonic interviews were recorded only with prior oral consent of the participant. Summary of each interview is extracted in an excel sheet retaining important quotes and verbatim when applicable.

Online survey

A google form was created to conduct an online survey to understand people's perception of risk and how the risk is assigned to different activities of daily living and perceptions

about utility of social distancing / personal hygiene measures in reducing this risk. Questions to understand the risk perceptions were used from the recent survey tool and guidance released by the World Health Organization (WHO) with adaptation to the local context. (WHO 2020)

The survey was prepared in English as well as in Marathi. It was shared through personal contact and social media pages of the organization. Efforts were made to share it with other organizations who can forward it in their network and to communities they work with.

Analysis

Being a rapid qualitative assessment our analysis approach involved two steps. 1) Creating a template summary of each interview 2) Consolidating summaries by participant types. This report is prepared based on this compilation. Responses from the online survey were analyzed using descriptive statistics.

Ethical issues

Information about the study was provided to the participant on telephone and confidentiality was assured. A verbal consent was taken on the phone. Anonymity of the data was maintained during analysis and reporting. People completing an online survey also provided consent before completing the survey instrument. The Independent Ethics Committee of Prayas approved the study.

Participant profile (qualitative interviews)

Sr. No.	Age	Gender	Education	Occupation	Area of residence	Additional information
1	30	F	SSC	Runs a mess	Chwal	
2	30	M	12th	Rickshaw driver	Slum	
3	30	M	Primary school	Cab driver	Slum	His friends are confirmed having Covid 19
4	35	F	12th	Outreach worker, ASHA	Slum	
5	30	F	Graduation	Outreach worker working in an NGO	Slum	
6	35	F	No formal education	Housemaid	Slum	
7	32	F	Primary school	Housemaid	Slum	
8	23	M	Secondary school	Cab owner, selling fruits and Vegetables during lockdown	Slum	
9	40	F	Primary School	Waste picker	Slum	
10	21	M	SY(graduation)	Student	Slum	
11	31	M	Education from Madrasa	Maulavi	Slum	
12	22	M	Primary School	Working in a shop	Slum	Confirmed having COVID-19
13	35	F	Not known	Sales Chikki in trains	Slum	

14	40	M	Secondary school	Local political leader	Slum	
15	40	F	No formal education	Sex worker (Gharwali)	Peth area	
16	42	F	Primary School	Sex worker and outreach worker in and NGO	Peth area	
17	45	F	Primary School	Sex worker and outreach worker in and NGO	Peth area	
18	32	F	No formal education	Sex worker	Peth area	
19	44	F	Graduation	Housewife	Peth area	Confirmed having COVID-19
20	81	F	12th	Housewife	Peth area	Staying alone in apartment
21	25	M	Graduation	Police	Chawl with common toilets/washrooms	
22	28	M	Graduation	Newspaper distributor	Chawl	
23	35	F	Graduation	Working in an NGO helpline	Apartment (currently migrated to native village)	
24	24	M	Graduation	Health worker in an NGO (currently is at his native city)	Apartment	Home quarantine at village
25	35	M	Graduation	Ayurveda Doctor	Apartment	
26	34	M	Graduation	General Practitioner (Doctor)	Apartment	Practicing near containment zones
27	33	F	Post-graduation	Vice Principal currently involved in survey related work	Apartment	
28	36	F	Graduation	Working with CBO	Apartment	distributing ration to poor and migrants
29	45	M	Graduation	Vegetable wholesaler and retailer	Apartment	
30	29	M	Post-graduation	Manager at CNG pump	Apartment	
31	51	F	Graduation	Working in a bank	Apartment	
32	30	F	PhD	Researcher and lecturer in Mental health	Apartment	
33	35	M	Graduation	Businessman	Apartment	Was distributing ration to migrants
34	38	F	Post-graduation	Principal currently working in a Covid awaited centre	Apartment	Also worked in a shelter for homeless people during initial days of pandemic

Participant profile (Online survey)

Variable	Category	N (%)
Gender	Women	394 (47.4%)
	Men	434 (52.6%)
	Other	4 (0.48%)
Age	<25	214 (25.7%)
	25-34	268 (32.2%)
	35-44	172 (20.7%)
	45-54	114 (13.7%)
	>54	64 (7.7%)
Education	1st to 7th standard	10 (1.2%)
	8th to 12th standard	159 (19.1%)
	Graduation	339 (40.8%)
	Post-graduation and above	324 (38.9%)
Current marital status	Married	502 (60.4%)
	Not married	330 (39.6%)
Occupation	Service	377 (45.3%)
	Professional	68 (8.3%)
	Shop owners/Business	72 (8.6%)
	Student	130 (15.5%)
	Freelance	27 (3.3%)
	Unemployed	58 (7.0%)
	Housewife	68 (8.2%)
	Other	32 (3.9%)
Residence	Urban	659 (79.2%)
	Rural	173 (20.8%)
State	Maharashtra	803 (96.5%)
	Outside Maharashtra	29 (3.5%)
District	Pune	535 (64.3%)
	Outside Pune	297 (35.7%)

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