

India COVID-19 Rapid Assessment Survey: Results from a Door-to-Door Campaign



VisionSpring is a pioneering global social enterprise, expanding the optical market using innovative distribution strategies to sell affordable eyeglasses to customers earning less than \$4/day. In 2019 alone, VisionSpring reached 1.3 million people with the corrective eyeglasses they need to sustain productivity, learn more in school, stay safe on the roads, and enjoy a higher quality of life. Since March 2020, VisionSpring is responding to the COVID-19 pandemic, adapting and leveraging our capabilities and networks in the communities we normally serve while [ensuring a safe return to vision work](#).

We are leveraging real time data from partners and community mobilization teams, including initial rapid assessments from our partner networks [in India](#) and [on the African continent](#).

In June 2020, VisionSpring successfully completed a Door-to-Door campaign across 61 districts in 12 states reaching 101,924 individuals in 20,053 households with hygiene kits including masks and soap as well as COVID-19 prevention counseling materials. On average, five people were present per household and nearly one-third (31%; n=6,117) identified a senior citizen as a resident.

During the first phase of the door-to-door campaign, VisionSpring’s trained field team simultaneously conducted face-to-face rapid assessment interviews,¹ gathering 5,924 responses over a period of nine days in 11 states, with the majority (78%; n=4,622) collected in Delhi and Uttar Pradesh.²

Focused review and analysis of data collected in Delhi and Uttar Pradesh revealed that nearly three quarters of respondents who agreed to participate in the assessment (73%; n=3,404) worked in low-income occupations such as daily wage labor (30%), farming (16%) and domestic work (4%). In addition, another 13% were homemakers and 2% senior citizens. Less than one-quarter of respondents (21%) were female (Figures 1 & 2).³

FIGURE 1: Occupation of respondents⁴ (n=4,622)

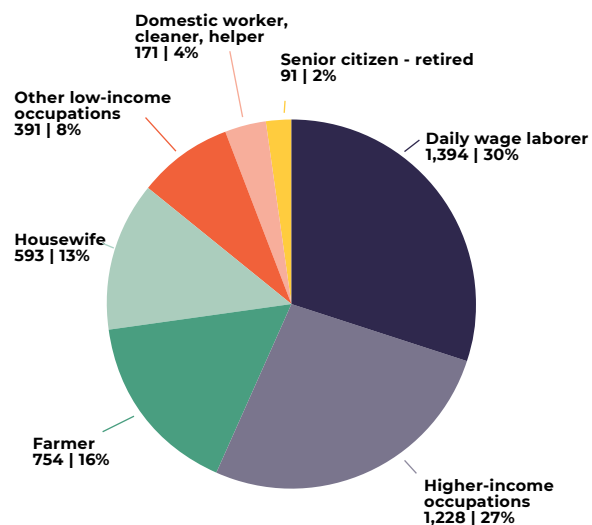


FIGURE 2: Respondents by state, income and gender (n=4,622)

State	Respondents	% of total responses	% of respondents in low-income occupations	% of respondents female
Uttar Pradesh	2,847	62%	78%	15%
Delhi	1,775	38%	66%	30%
Total	4,622	100%	73%	21%

1. low-income occupations. Whether they consented to participate in the assessment or not, all households were offered a hygiene kit.
 2. Because the assessment and distribution took place during lockdown, the geographic coverage of responses reflects the locations of team members who were able to work within a 2-kilometer radius of their containment zone.
 3. The majority of staff on the enumeration teams were male and this may have influenced whether a male answered the door and responded to the survey. As a result, the majority of the respondents accepting to answer the survey were also male.
 4. The higher-income group includes degreed professionals, government officials, those working in private industry as well as small- and large-scale entrepreneurs. Other low-income occupation includes beggars, plumbers, garment workers/weavers/artisans, garbage collectors, street vendors, rickshaw pullers, etc.)

There is a widespread knowledge of COVID-19 symptoms, though 'difficulty breathing' was rarely identified as an early sign

As of the May-June lockdown period, almost all of the 4,622 respondents in Delhi and Uttar Pradesh (94%) affirmed hearing of COVID-19 and 28% could correctly identify at least one major symptom. More than half (66%) correctly named two early COVID-19 symptoms, namely fever and cough, while only 5% of respondents were able to correctly identify all three (fever, cough & difficulty breathing). While a majority identified fever and cough, difficulty breathing, a common symptom 2-14 days after exposure, was rarely named - only in 8% of responses (Figures 3 & 3.1).

Modes of infection were generally understood, as the majority of respondents (55%; n=2,516) correctly chose "all" from a list of known infection routes. The question allowed for multiple responses and 40% (n=1,828) identified "person-to-person spread (through sneezing or coughing)" from the list of options.

In total, the survey included 12 questions on COVID-19 knowledge, awareness, modes of transmission and myths. Using a point system (one point for each correctly answered question) to generate a composite

FIGURE 3: Ability of respondents to name up to three symptoms associated with COVID-19 (n=4,380)

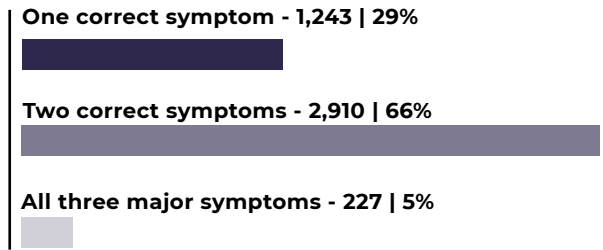
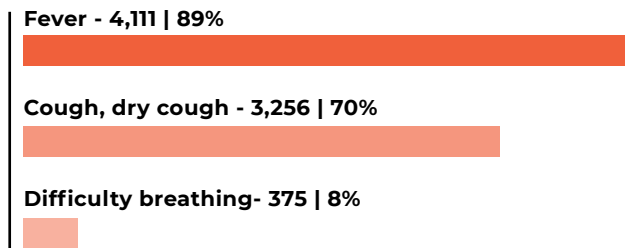
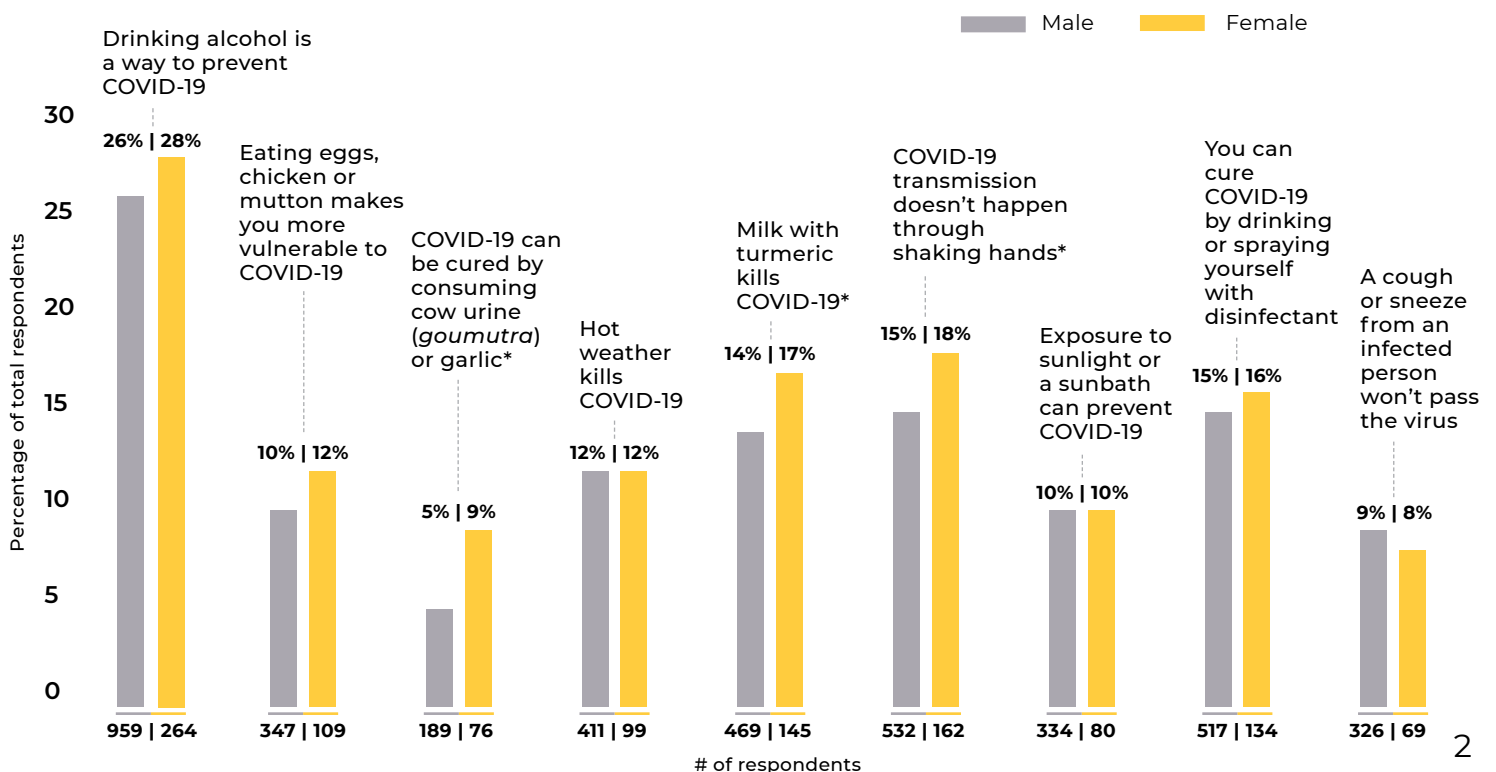


FIGURE 3.1: Symptoms of COVID-19 most commonly identified by respondents* (n=4,622)



*Percentages do not add up to 100% because the question allowed for multiple choices.

FIGURE 4: Proportion of men and women who answered myth and awareness-related questions *incorrectly*



score, 74% scored in the 'adequate' COVID-19 knowledge range, using a threshold of 9 points or above (average of 9.9 points), with more than one third of the 'adequate' knowledge group (36%) achieving a perfect score of 12 points. Slightly more than one quarter (26%), had inadequate knowledge scores below the 9-point threshold.

A quarter (26%) of respondents were unable to name drinking alcohol as *not* a way to prevent COVID-19. This indicates that misinformation, myths and misconceptions persist, as well as 15% who answered incorrectly that shaking hands is a way to prevent transmission. In addition, the idea that drinking or spraying disinfectant can cure COVID-19 and that milk with turmeric kills COVID-19 was incorrectly noted among 14% and 13% of respondents, respectively.

Gender was significantly associated with incorrect answers about killing COVID-19 by drinking milk with turmeric (17% incorrect; $p=.004$) as well as consumption of cow urine/garlic (9% incorrect; $p=.000$). In addition, 18% of female respondents were also unable to identify refraining from shaking hands as an effective prevention practice ($p=.002$) (Figure 4).

Masks or “face coverings” are in use but may not be high quality

In mid-April, India entered into an extended lockdown period and masks were declared mandatory in all public places for adults and children >5 years old.⁵ The recommendation stipulates, at a minimum, a 3-ply mask.⁶ Three-quarters of respondents (75%; $n=3,448$) affirmed ownership of a mask or 'mouth covering' for use outside their home, however, the quality of the mask was potentially inadequate as more than one third of those owning a mask (37%) indicated the use of a simple piece of cloth to cover their mouth and nose (Table 1).

FIGURE 5: Proportion of respondents without masks in total and by location

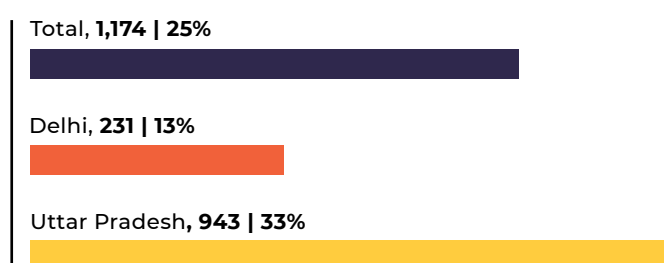
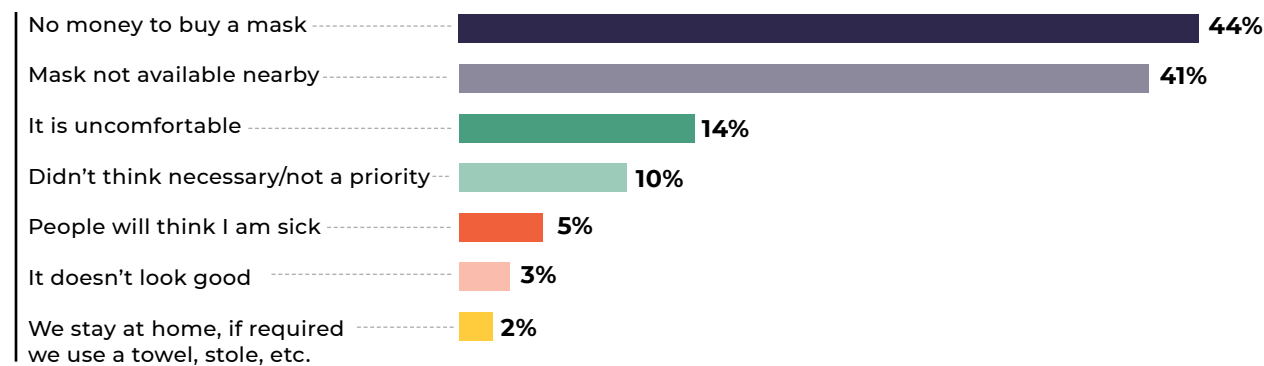


TABLE 1: Mask ownership and type

Mask related questions		Total %	Low-income respondents (%)	Female (%)	Delhi (%)	Uttar Pradesh (%)
Owns a mask (n=4,622)	Yes	75%	69%	72%	87%	67%
	No	25%	31%	28%	13% Women 19% Low-income 18%	33% Women 40% Low-income 37%
If yes, type of mask owned ⁷	Simple cloth covering	37%	39%	36%	33%	39%
	Reusable cloth mask with 2+ layers	33%	33%	29%	31%	35%
	Reusable cloth mask with 1 layer of fabric	26%	24%	31%	29%	24%
	Disposable/surgical mask	6%	6%	4%	4%	8%
	N-95 mask	5%	4%	5%	10%	1%

FIGURE 6: Reason for not having a mask (of respondents who answered 'no' to owning a mask)



More than one third (39%) of those in low-income occupations were using a simple piece of cloth, as were a similar proportion of female respondents (36%). Geography also played a role in mask-ownership, with double the amount of respondents *without* a mask from Uttar Pradesh (33%) as compared to Delhi (13%).

When enumerators followed up to ask why respondents lacked a mask (n=1,174), slightly less than half (44%) answered: “no money to buy a mask.” This was followed by more than one-third (41%) who stated, “mask not available nearby” (Figure 6).

The majority of those with ‘adequate’ knowledge of COVID-19 from the 12-question composite score, also owned a mask (79%) and these variables – a high score and mask ownership – were significantly associated (p=.000). Interestingly, the majority of respondents with less knowledge of COVID-19 still owned a mask (64%). To ensure access to masks, VisionSpring has produced and distributed more than 100,000 triple-ply cloth masks to reduce community transmission within and among households in India, along with graphic, easy-to-read informational leaflets on their importance, as well as proper wear and care.

Handwashing is increasing, but respondents observed no increase in handwashing facilities in their localities; soap is also lacking

Messages about the importance and frequency of handwashing are clearly being heard. The majority of respondents (79%; n=3,612) stated they wash their hands with soap and water for 20 seconds or more (62%) (Figure 8), and that handwashing frequency has increased since the start of the 2020 lockdown period at the end of March (70%; n=3,168) (Figure 9).

Recommendations:

- Instruction about mask type and necessary layers is needed to ensure people are effectively masked.
- Masks are not always affordable, simple instructions on making reusable masks at home can increase access.
- To guard against mask-fatigue, regular reminders on the importance of consistent mask wear are necessary regardless of a person’s knowledge of COVID-19.

5. Sebastian, M. (2020). Masks Made Mandatory Across India: The Guidelines For The Extended Lockdown. Retrieved July 29, 2020, from HUFFPOST website: https://www.huffingtonpost.in/entry/new-lockdown-guidelines-from-home-ministry_in_5e96a803c5b6ead140049f80
 6. Vardhan, Harsh (Health Minister, Government of India). “Request all to wear triple layer cloth masks and encourage others the same.” 1 July 2020: <https://mobile.twitter.com/drharshvardhan/status/1285470737885614080/photo/1>
 7. Multiple-response question so proportions add up to more than 100%

Of the 16% (n=737) who reported washing their hands with only water (Figure 7), there was a statistically significant association with low-income occupations (p=.000) including farmers and daily wage labors. Combined, these two groups represented nearly half of those washing only with water (26% and 23%, individually), likely due to a lack of access to water. In addition, geography was significantly associated (p=.000) with more than double the number of individuals in Uttar Pradesh washing with only water - 20% compared to 9% in Delhi. Furthermore, there was a lower proportion of respondents washing their hands for 20 seconds or more in Uttar Pradesh - 56% compared to 73% in Delhi (p=.000) (please refer to tables 1, 2 and 3 in the Annex).

20% of respondents in Uttar Pradesh reported washing their hands with only water.

When respondents were asked about barriers to handwashing in their communities, lack of soap and inadequate knowledge/seriousness about handwashing ranked at the top - 33% and 26%, respectively. In addition, the majority of respondents (90%) indicated that they couldn't recall any new handwashing stations set up during lockdown near their residence (Figure 10). Of these, the majority (68%) were from Uttar Pradesh (p=.000).

Finally, similar to mask ownership, having 'adequate' knowledge of COVID-19 (9 or more points on the scoring system) was significantly associated with handwashing for 20 seconds or more (p=.000).

VisionSpring is currently building activities to place handwashing stations in central locations and distributing prevention supplies in communities.

Recommendation:

- More handwashing facilities in high footfall areas in accordance with WHO guidelines for hospitals, schools and businesses.

FIGURE 7: How people wash their hands (n=4,598)

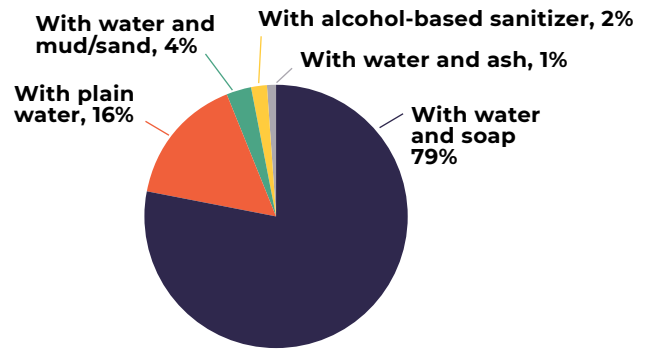


FIGURE 8: Reported handwashing duration (n=4,622)

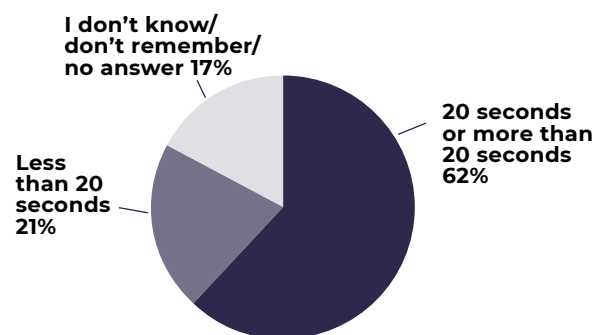


FIGURE 9: Reported increase in handwashing frequency since lockdown (n=4,521)

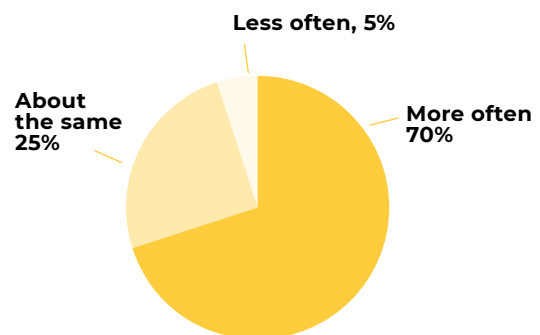
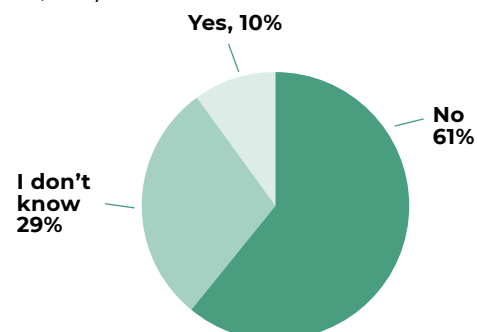


FIGURE 10: Presence of new handwashing stations observed in proximity to home/work (n=4,622)



Conclusions

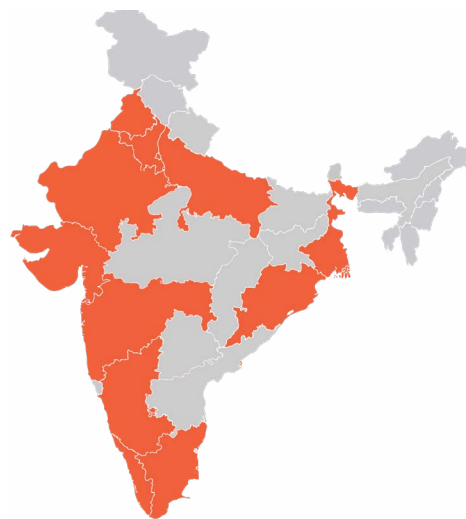
In the weeks since the rapid assessment, VisionSpring's emergency response activities continue to expand with a focus on the following priorities:

- A global supply of personal protective equipment (PPE) and COVID-response commodities, closing orders for over 1.6m units for over 130 partners across seven countries and a goal of delivering two million units in 2020.
- Initiating COVID-safe workplaces in factories and informal workplaces with handwashing stations, reusable cloth masks and fact-based communication to encourage sustainable behavior change. In India, these efforts are initially targeting 42,000 weaver households in Odisha, Rajasthan and Uttar Pradesh and 3,800 tea picker households in Assam.
- Charting a safe path back to vision work, informed by infection prevention and control standards to protect health workers and customers alike.

Within each effort, data collection for evidence-based decision making is essential. We recognize the importance of rapid assessments in tracking the public's knowledge and misperceptions during a time of disease outbreak. We will continue to share insights and assessment results in a continuing effort to inform our collective COVID-19 response.

FIGURE 11:
**States where
VisionSpring
distributed**

Uttar Pradesh,
Maharashtra,
Delhi, Karnataka,
Haryana, Tamil
Nadu, Odisha,
Kerala, West
Bengal, Gujarat,
Rajasthan, Punjab



**5,924
responses**
were collected
in total across
44 districts
in 11 states of
India.

The full Door-to-Door campaign reached more than **53k households** and nearly **250k individuals.**



Results, particularly those related to myths, symptoms as well as mask-wearing and hand washing have influenced the way VisionSpring is training staff and partners to conduct counseling during community outreach.

Annex

TABLE 1: Results of chi square test of respondents washing hands with plain water and demographics variables

Washing hands with plain water			p
State	Delhi	155 (8.7%)	0.000*
	Uttar Pradesh	582 (20.4%)	
Occupation	Daily wage labor	323 (23%)	0.000*
	Higher-income occupations	61 (5%)	
	Farmer	197 (26%)	
	Housewife	84 (14%)	
	Other low-income occupations	28 (7%)	
	Domestic worker, cleaner, helper	30 (17.5%)	
	Senior citizen/senior citizen retired	14 (15%)	

TABLE 2: Hand washing practices by demographic variables

Hand washing-related questions		Total %	Low-income respondents (%)	Female (%)	Delhi (%)	Uttar Pradesh (%)
How do wash your hands (n=4,622)	With water and soap	79%	74%	75%	87%	73%
	With plain water	16%	20%	17%	9%	20%
	With water and mud/sand	3%	3%	4%	1%	4%
	With alcohol-based hand sanitizer	2%	1%	2%	2%	2%
	With water and ash	1%	1%	1%	1%	1%
How long do you wash your hands (n=4,622)	20 seconds or more than 20 seconds	62%	58%	56%	73%	56%
	Less than 20 seconds	21%	23%	22%	15%	24%
	I don't remember/I don't know/No response	17%	19%	22%	12%	20%
Reason that prevents you and family members to wash hands (n=4,622)	Lack of soap	33%	34%	36%	34%	33%
	Lack of knowledge about handwashing/seriousness	26%	25%	28%	32%	22%
	No facilities such as hand pump, municipality tap/handwashing stations in my area	11%	11%	11%	9%	13%
	Lack of water or the water is far away	11%	12%	13%	15%	9%
	No idea/I don't know	10%	10%	8%	7%	13%
	Don't have time to stop for handwashing (too busy)	8%	9%	4%	4%	11%

TABLE 3: Results of chi square test of hand washing stations or resources created during lockdown and geography)

Have you seen any new handwashing stations or resources created in your neighborhood/village since lockdown began?	State			p
	Delhi	Uttar Pradesh	Total	
I don't know	671 (37.8%)	696 (24.4%)	1,367 (30%)	0.000*
No	884 (49.8%)	1,926 (67.7%)	2,810 (60%)	
Yes	220 (12.4%)	225 (7.9%)	445 (10%)	
Total	1,775	2,847	4,622	