Coronavirus pandemic

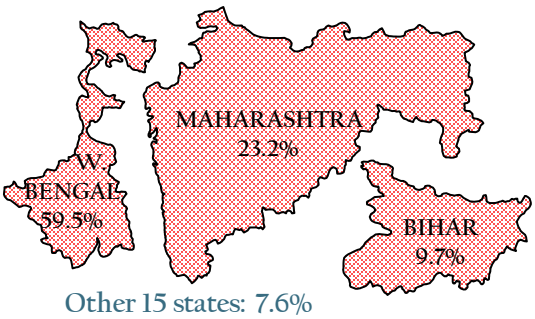
Status of hand-washing practice: THEN v/s NOW

The unprecedented pandemic (Covid-19), caused by the novel corona virus, has devastated the human society. As on April 25th, at least 2.72 million people across the world have been infected causing at least 1.87 lakh deaths[1]. Infection by the novel corona virus, which spreads from person to person, cannot be controlled but managed with some preventive measures like remaining isolated through social distancing, use of face mask, handwashing with soap and water etc. To slowdown the transmission, Government of India (GoI) declared complete lock-down[2] on 24th March, 2020 to enforce social distancing and advocated taking other measures through mass media. However, essential services were out of this lock-down restriction.

SIGMA Foundation, a not-for-profit organization, which works across many states of India in the WASH and other sectors decided to have a rapid estimate of how the handwashing practice has changed because of its criticality in preventing infection. The objective was to learn about the handwashing status for planning suitable interventions for improvement. A questionnaire was framed to get responses from the people through WhatsApp and email.

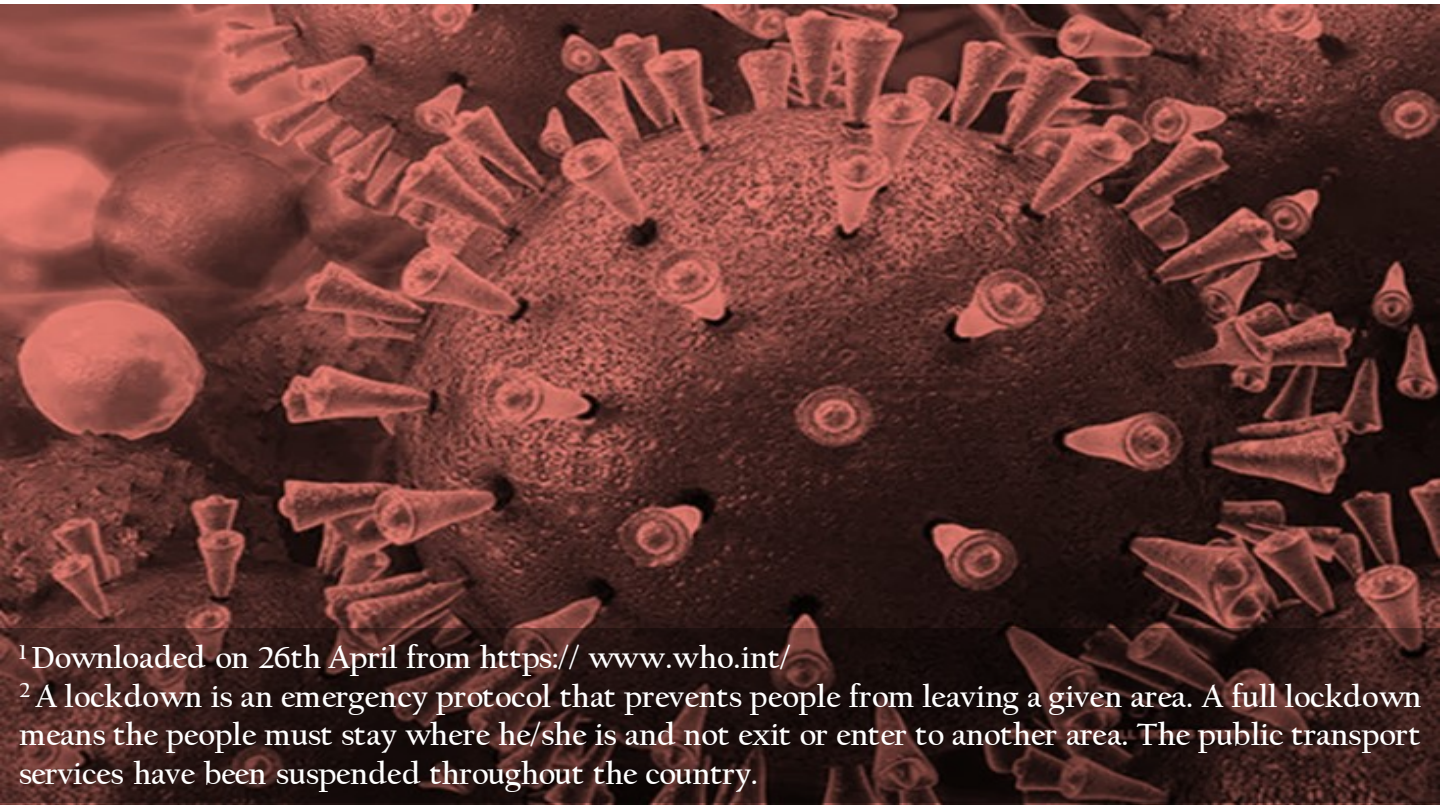
SURVEY PERIOD


RESPONSES: 1,165



Other 15 states: 7.6%

GEOGRAPHICAL COVERAGE

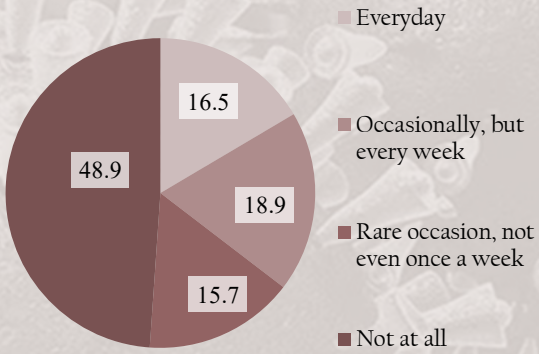


[1] Downloaded on 26th April from https:// www.who.int/

[2] A lockdown is an emergency protocol that prevents people from leaving a given area. A full lockdown means the people must stay where he/she is and not exit or enter to another area. The public transport services have been suspended throughout the country.

People going out during lock-down

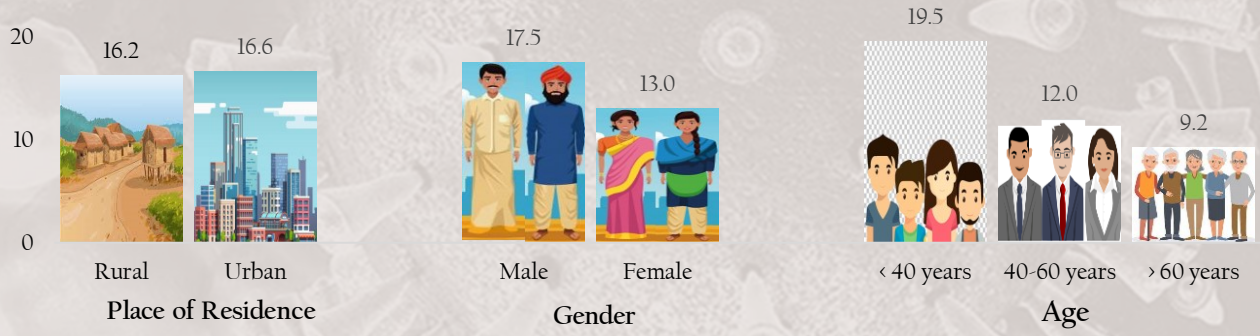
Nearly half of the people (48.9%) stayed at home during the lock-down period while 16.5% respondents were going out every day and other 18.9% respondents were going out at least once a week. This indicates that the lock down was not followed strictly by many, since even for essential needs one need not go out every day (only a small share of people could be associated with essential services).



Who were going out every day?

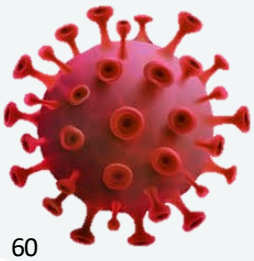
16.2% of the rural respondents and 16.6% of the urban respondents were going out of their home every day during the lock down indicating hardly any change in the behaviour between urban and rural population. Men were going out more than women, as expected. Further, 19.5% of respondents below 40 years and 9.2% of elderly people (more than 60 years of age) were going out every day. The elderly people are having very high risk and they should not go out. So, there is need to intensify campaign in alerting them from not going out and to take all precautions, if they are compelled to go out. This is also important for the local authority. They need to identify those households in which only aged people are living and have to go out for daily necessities, so that essential commodities can be reached to their residences to reduce their risk of infection.

Characteristics of the persons going out everyday during the lock-down period (%)

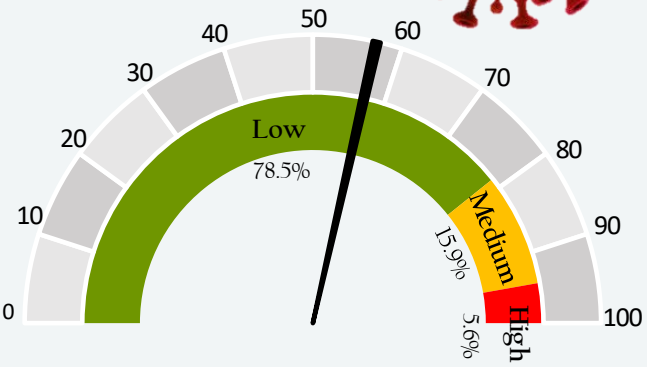


A high statistical association (at 95% confidence level) was found between the risk perception of being infected and the instance of going out during the lock-down. The persons going out more frequently (everyday or occasionally every week) during the lock-down were more likely to have perceived high risk.

Perception of risk of infection

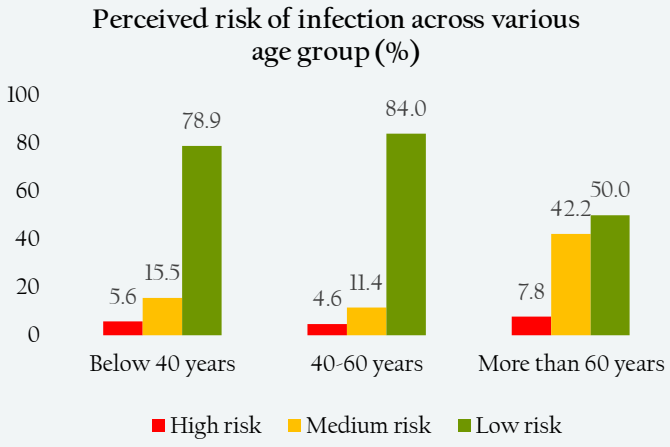


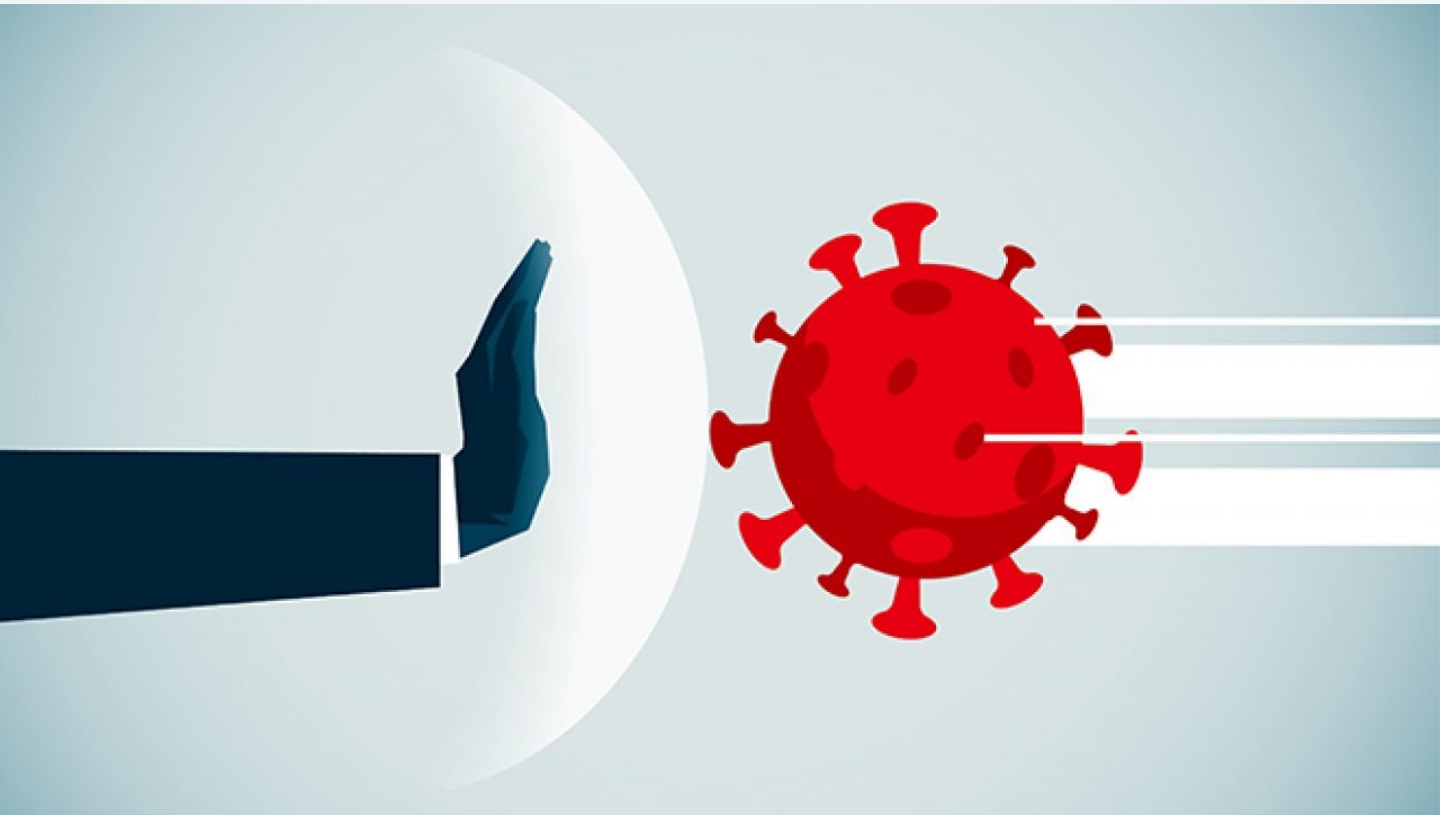
The risk of getting infected was perceived as high by 5.6% respondents. The risk will be high in people who go out daily or if they have some illness or are of advance age. The morbidity pattern was not known and 6.5% respondents were above 60 years of age. All the aged persons and those who were going out daily (16.5%), i.e., 23.0% people should have perceived them to be at high risk. So, the perceived risk was lower than real risk.



Perception of risk across age groups

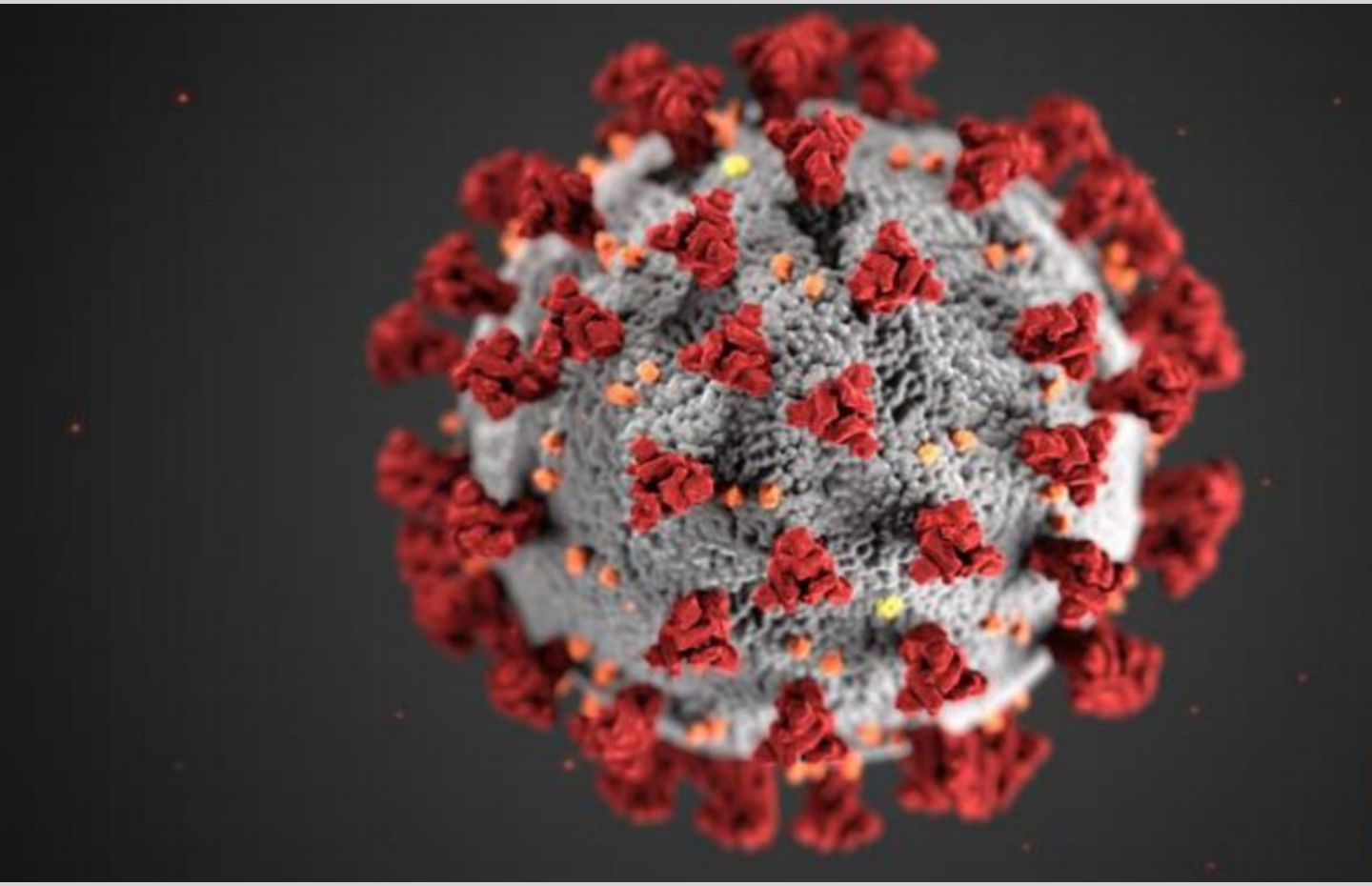
The magnitude of high and medium risk perception was higher among the age group of more than 60 years compared to that among other two age groups (below 40 years of age and between 40 and 60 years). Actually all the persons above 60 years are at high risk and they face the highest death rate from Covid-19. Low perception of risk by them reflects inability to adequately communicate the risk factors to the people.



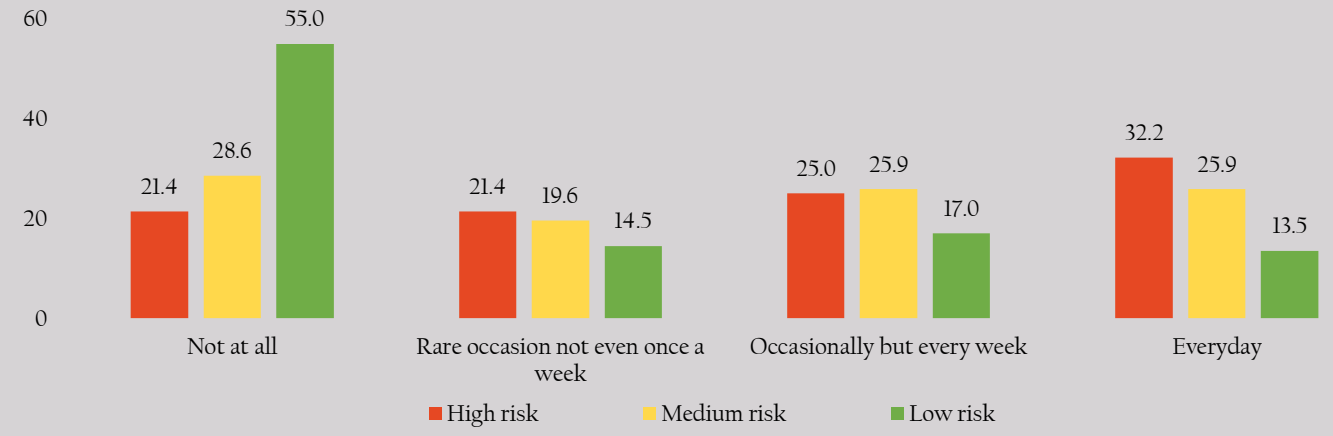


Perception of risk and practice of going out

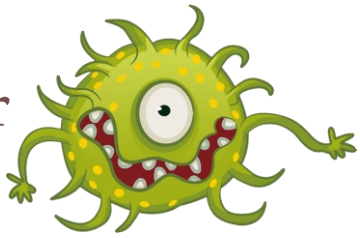
Out of the persons who were going out daily, only 32.2% considered them to be at high risk and 13.5% considered them to be at low risk, which may be dangerous. Therefore, people who were going out daily could not perceive the high risk of their getting infected. It was found that there was significant statistical association (at 95% confidence level) between the practice of going out daily and perceiving themselves being at high risk. However, total percentage of people who were going out daily and considered themselves to be at high risk was rather low. That indicates, although people could perceive that going out was risky but the perceived risk was not critical enough to trigger their change in behaiviour of not going out for many of them. This calls for improving communication on risk perception so that people appreciate the risk before they venture out.



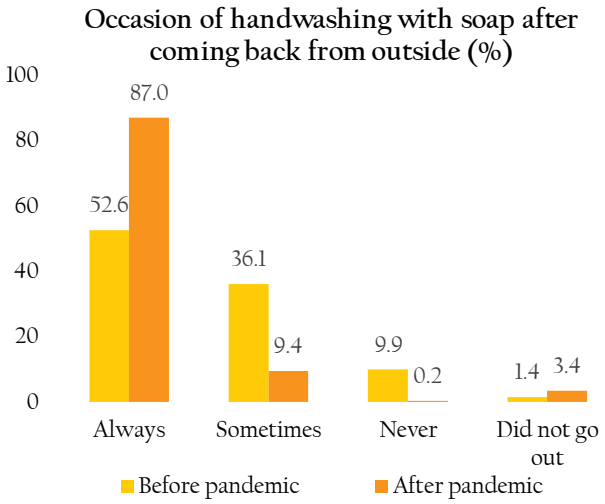
Perceived risk of infection v/s instances of going out during lock-down (%)



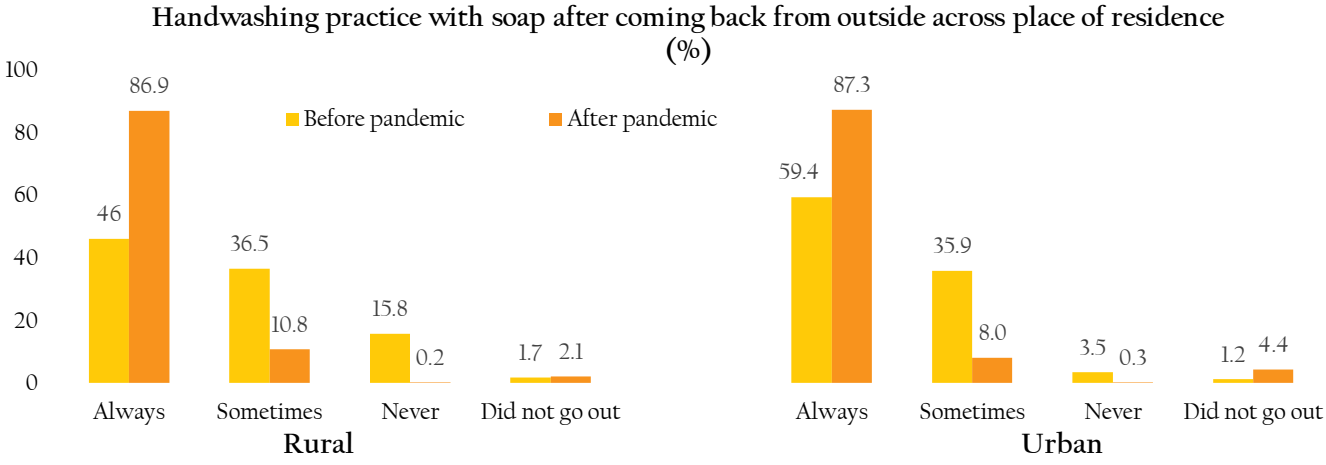
Handwashing practices after coming back from outside

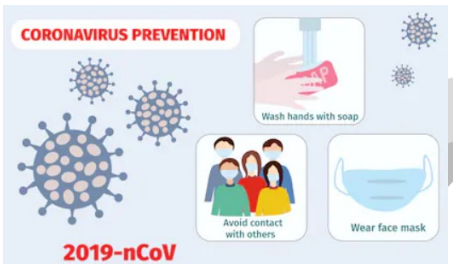


Handwashing practices have improved significantly after the beginning of Covid-19 pandemic. However, 13.0% people who were going out were yet to practice the same. Smart phone users generally have better amenities and if even 13.0% of them are yet to adopt the practice, that is a cause of concern. The handwashing behaviour got improved both in rural as well as in urban areas, the incidence of which were close to each other after the pandemic.



However, magnitude of improvement was larger in rural area, which had a lower base before pandemic started compared to their urban counterpart. But, people who were still not washing hands at all after coming back from outside was 15.8% in rural area and only 3.5% in urban areas, which calls for more focus for improving such behaviour in rural areas. However, available water and soap and infrastructure for convenience in handwashing is more problematic in the rural areas.

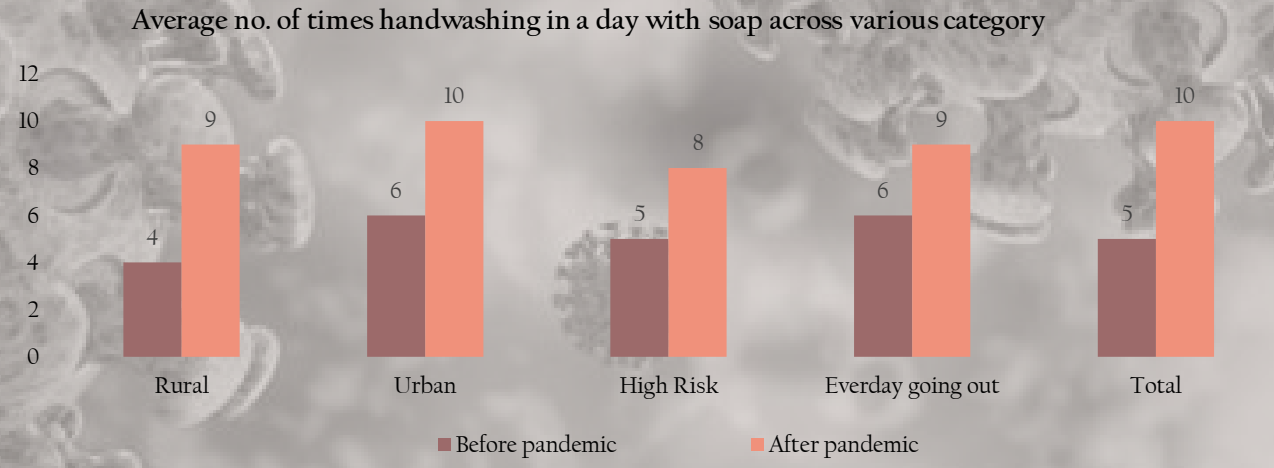




Wash hands for about 20 seconds with soap and hot water or use a sanitiser gel

Improvement in handwashing practice and associated factors

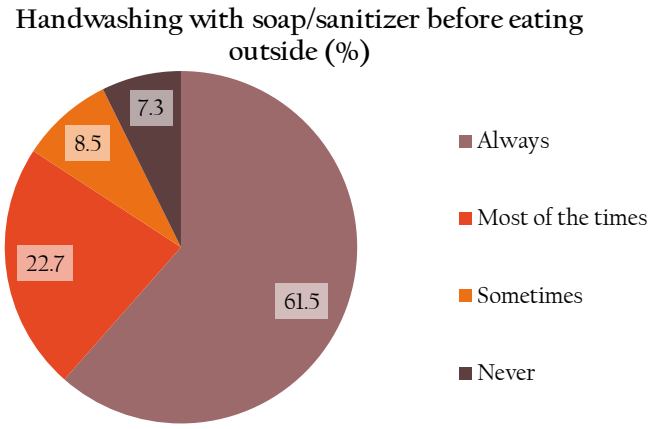
The number of times people washed their hands with soap and water per day on an average increased from 5 before the pandemic to 10 after the pandemic. The handwashing behaviour has improved across all categories of the people in terms of place of residence, perception of risk and practice of going out during lock down. The magnitude of improvement in incidence of handwashing with soap did not have statistically significant association with area of residence, education level and age of the respondents. **Since improvement was universal across all sections, this is a good opportunity to strengthen campaign for handwashing with soap and water and continue that after the pandemic ends for permanent public health benefit.**



There was statistically significant association (at 95% confidence level) between improvement in handwashing and the practice of going out. There was also statistically significant difference in improvement in handwashing practice between high perceived risk group and low perceived risk group. Improvement was more significant for low perceived risk group compared to the group with high perceived risk. This is contrary to what was expected. Statistically, the improvement in handwashing practice differs significantly (at 95% confidence level) between the persons going out of home after lock-down and the persons who were home bound during the same period. Improvement in behaviour was more significant for persons going out of home compared to home-bound people, which will be helpful to reduce transmission of the virus.

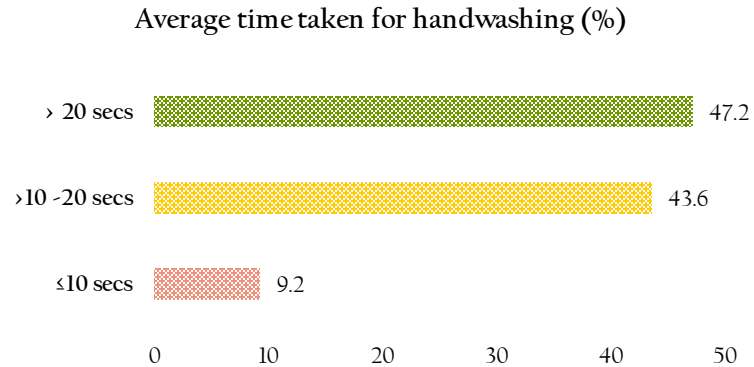
Handwashing practice before eating outside

61.5% persons used soap/sanitizer for washing their hands before eating outside home. On the other extreme, 7.3% respondents never used soap for washing hands at such occasion.



Average time taken for handwashing

The average time taken for handwashing was more than 20 seconds for 47.2% people. This indicates that there is need for campaigning on proper handwashing practices which were being followed by less than 50% people.



The survey covered only those having smart phone or internet connectivity and, therefore, the lower echelon of the society has not been covered proportionate to their population. In spite of that, there are significant lessons which can help to design response to the pandemic as well as future strategy in improving and sustaining hand-washing practice in India.