



ATTITUDE TOWARDS FACEMASK AND SOCIAL DISTANCING PRACTICES AMONG PEOPLE IN POST-COVID-19 LOCKDOWN: A QUALITATIVE STUDY

Forensic Medicine

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ABSTRACT

Background: The only available control measures are non-pharmacological interventions (NPIs) in due absence of a vaccine or drugs for pandemic COVID-19. Since the government issued phase-wise nationwide unlock, drastic change in the growth rate of cases observed. **Objectives:** This study conducted to ascertain the practice attitude towards the use of facemask and social distancing measures by people in public with their understanding of it may inform insight regarding the growth of COVID-19. **Settings and Design:** This observational qualitative study was carried out at public places in Rishikesh, India from 1st June to 31st August 2020. **Methods:** Data has been collected from different public (crowd) areas such as shops, markets, banks, local transport stations, etc. after visits. Everyone in the public was observed. Collected data were segregated into the segment based on research questions and analyzed using qualitative content analysis. People were not engaged in designing a study, research questions setting, understanding or evaluating results, or research reporting. Ethical approval or consent was not required as the study was related to public health without the involvement of people. **Results:** People have a different attitude towards the use of facemask and social distancing measures, and different knowledge or understanding regarding COVID-19 and prevention. **Conclusion:** The confusion due to information pollution, new unfamiliar practices, serious disease means high mortality, attack on freedom and diversion of the real issue in understanding the ongoing health crisis led disobedient attitude towards the preventive measure.

KEYWORDS

Attitude, Facemask, Social Distancing, COVID-19, Practices

INTRODUCTION:

The only available control measures are non-pharmacological interventions (NPIs) in due absence of a vaccine or drugs for coronavirus disease (COVID-19). NPIs in the population level including travel suspension and national crisis response was helpful to flatten the epidemic bend of COVID-19 in China. (1) Similar practice and lockdown enforced in India. (2-4) Since nationwide phase-wise unlock issued, (5) drastic changes in the growth rate of cases observed. (6)

Considering that, a study of practice attitude towards NPIs such as facemask use and maintaining social distancing by people in public with their understanding of it may inform insight regarding the growth of COVID-19.

Table1. Phase wise lockdown and Unlock(7)

Phase	Lockdown	Unlock
1(one)	25.03.2020	01.06.2020
2(two)	15.04.2020	01.07.2020
3(three)	04.05.2020	01.08.2020
4(four)	18.05.2020	01.09.2020(will start)

Methods:

The study observation started from 1st June 2020 to 31st August 2020, in Rishikesh, India. Everyone in the public was observed. Findings are recorded after observing the facemask and social distancing practices in a crowd by people and public conversation regarding COVID-19 and practices of its preventive measures. Data has been collected from a public area such as shops, markets, banks, local transport stations, etc. after visits. Collected data were segregated into the segments and sub-segments based on research questions, and analyzed using qualitative content analysis. People were not engaged in designing a study, research questions setting, understanding or evaluating results, or research reporting. Ethical approval or consent was not required, as the study was observation related to public health concern without the involvement of people.

Results:

The study findings are highlighted in Table2, Table3, and Table4 respectively.

Table2. Social distancing practices (≥ 1 meter)

Follow measure
I. Social distancing followed ≥ 1 meter

Don't follow the measure

- Social distancing maintained <1 meter distance
- Social distancing is not maintained at all.

Table3. Facemask use practices

Wear mask correctly

- Using the mask as per guidelines
- Mask removes while talking or sneezing or coughing though wear correctly
- Frequent touching of the mask though wear correctly

Wear mask incorrectly

- Mask covers the nose only
- Mask covers the mouth only
- Mask covers the chin only
- Mask wear around the neck
- Mask carrying in the hand

Do not use mask

Table 4. Conversation regarding COVID-19 and preventive measures

Have knowledge
I. Mask use and social distancing prevent coronavirus infection
Problems of mask use
I. Mask causes breathing difficulty
ii. Mask decrease oxygen (O ₂) and increase the carbon dioxide (CO ₂)
iii. Mask increases the chances of infection
Asymptomatic or pre-symptomatic or healthy status
I. No need to use a mask and social distancing if symptoms absent
ii. If not infected, no need to use a mask and social distancing
Age
I. Coronavirus causes problems only to elders and children
Emphasis on social distancing
I. No need for mask use if social distancing of ≥1 meter maintained
Immunity
I. If maintained body immunity, coronavirus cannot infect.
Freedom or arrogance
I. Would not use a mask even if got infection or chances of infection
Business or conspiracy
I. Government is doing for business, preventive measures do not help
ii. Coronavirus is nothing new or serious but a conspiracy
Avoidance of attention
I. Carrying mask just to avoid the attention of people working for the authority

DISCUSSION:

The severe acute respiratory syndrome corona virus-19 (SARS-CoV-19) primarily spread between people through contact routes and respiratory droplets based on current evidence.(8) The latest information suggests the potential airborne spread of the virus in a closed environment with air recirculation.(9)

The NPIs are to break the transmission chain. Social distancing even a minimum of 1 meter has not been maintained by everyone. Social distancing practice of < 1 meter distance reduces the chance of transmission to 12.8% and ≥1 meter further reduces to 2.6% and might be that 2 meter distance more effective.(10) The maintaining of a minimum 2 meter social distance has not been observed even though advised by the authority.

The findings regarding masks explain inadequate knowledge about the correct way to wear masks or the ignorance of people, besides those use correctly. Those wear masks correctly too, some do not know what should not do after wearing the mask. Existing literature shows that facemask use reduces the chance of transmission to 3.1% where facemask not in use is 17.4% and is protected irrespective of setting whether use by health care workers or people in the community.(10)

People have different understanding or views on COVID-19 and its preventive measures. The use of a facemask does not cause breathing difficulty in a healthy person. Facemask had been used by health professionals every day at work without much difficulty. People having a breathing problem, age less than 2 years, or those who need assistance to remove the mask or incapacitated are advised not to wear the mask.(11) SARS-CoV-2 is about 60-140 nanometers (nm),(12) which is 260 to 600 times larger than CO₂ (size 0.33 nm) and O₂ is even smaller.(13) It unlikely that CO₂ retention between the mask and face to extent that causes hypercapnia after wearing a mask. The mask still is porous enough to free flow CO₂ and O₂ through barriers. People did not specify which types of the mask have been referred. Indeed, the mask does not impact much on physiological respiratory functions after wearing a short period among health workers.(14,15) N95 mask has been found safe and comfortable for use in children at rest and on mild exertion.(16) The frequent touching of mask without hand wash, which might be the explanation of wearing mask increase the chance of infection.

Symptomatic or pre-symptomatic or healthy status and age as a criterion for deciding mask use or social distancing practice by people reflect their lack of in-depth knowledge about COVID-19 transmission. The pre-symptomatic or asymptomatic period transmission is one of the drivers of epidemic growth of COVID-19.(17-21) Peak viral load (infectiousness) observed 2 days prior to the beginning of symptom and on the first day of symptoms and estimated up to 44% transmission during the cases' pre-symptomatic period with considerable family clustering, active case, and quarantine outside the home setting.(22) The older age though more prone to and have a serious infection, does not prevent younger from infection.(11)

The emphasis on immunity or social distancing might be fact that these preventive measures issued by authority are unfamiliar new practices in India at the community level that make them emphasize alternatives. The difference in social classes of people also a very important factor in taking steps by individuals during a crisis i.e. whether stay at home or earn money to survive.

It also observed that preventive measures were perceived as an attack on their freedom by people. COVID-19 is nothing serious health issue for those carrying masks just to avoid attention. Serious health issue means high mortality that could be their perception. The conspiracy or business view reflects the perception of people over the COVID-19 situation as an attempt by the government to mask failure or diversion attempt.

The start of unlocking, the direction of zone wise Dos and Don'ts by authority gave the public a kind of relaxation in their routine life. It can be assumed that it also encouraged people to disobey or abuse order, while it was being done to address the socio-economic concern. The reluctant attitude of people towards preventive measures make them infected easily in-crowd as high chances to encounter the asymptomatic infected person or act as a carrier. It also made it vulnerable to people engaged in delivering essential services due to regular exposure to the asymptomatic individual in working place.

Universal mask use and social distancing measures can considerably decrease the danger of family COVID-19 transmission irrespective of family size or crowding.(19) It is also uncertain that people who are not following the preventive measures are completely healthy or not suffering any morbid condition. The interpretations of information in a different area that are reinterpreted by a second and third person have led such inaccurate or misleading information transmission and information pollution. Available literature supports that a late surge of cases in the COVID-19 graph is the reflection of the public disobedient attitude since unlocking started. The late surge of the number of cases has challenged the containment measures and underscore the effectiveness of NPIs.

The limitation is that we cannot comment on the preventive measures practiced by people at home. The study did not focus on a range of people un-follow the order of an authority.

CONCLUSION:

The confusion due to information pollution, new unfamiliar practices, serious disease means high mortality perception, attack on freedom, and diversion of the real issue in understanding the ongoing health crisis led disobedient attitude towards preventive measures. It is evident that the disobedience attitude caused a late surge of COVID-19 infection.

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