



ISSN (E): 2277-7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2023; 12(3): 5824-5826  
© 2023 TPI

[www.thepharmajournal.com](http://www.thepharmajournal.com)

Received: 02-01-2023

Accepted: 07-02-2023

## Rickey Rani Boruah

Department of Textiles and Apparel Designing, College of Community Science, Assam Agricultural University, Jorhat, Assam, India

## Priyanka Borah

Department of Textiles and Apparel Designing, College of Community Science, Assam Agricultural University, Jorhat, Assam, India

## Purnima Das

Department of Textiles and Apparel Designing, College of Community Science, Assam Agricultural University, Jorhat, Assam, India

## Shilpi Buragohain

Department of Textiles and Apparel Designing, College of Community Science, Assam Agricultural University, Jorhat, Assam, India

## M Jeena Devi

Department of Textiles and Apparel Designing, College of Community Science, Assam Agricultural University, Jorhat, Assam, India

## Corresponding Author:

### Rickey Rani Boruah

Department of Textiles and Apparel Designing, College of Community Science, Assam Agricultural University, Jorhat, Assam, India

## Study on uses of face mask by the people of Jorhat district of Assam

**Rickey Rani Boruah, Priyanka Borah, Purnima Das, Shilpi Buragohain and M Jeena Devi**

### Abstract

Wearing of face mask is recommended as part of personal protective equipment and as a public health measure to prevent the spread of corona virus diseases during pandemic. Present study was conducted in Assam when the wearing of mask was mandatory for everyone in public and workplaces. The study was conducted on use of face mask by the people of Jorhat district of Assam. The mask usage and safety practices followed were reported in this paper.

**Keywords:** COVID 19, facemask, problems faced, fabric

### Introduction

The nose is a complex organ that forms an important part of the face and has multiple functions. The primary function of the nose is to humidify, warm the inspired air and also aids at removing the harmful particles from entering into the lower respiratory tract. It is the frontline defender of the respiratory system (Purushothaman *et al.* 2021) <sup>[6]</sup>.

Facemasks are of vital importance in protecting the healthcare workers from the Corona virus disease (SARS-COV 2). The World health organization (WHO) announced the pandemic of COVID-19 on 11th March 2020. The use of face masks have become ubiquitous to prevent the spread of COVID-19. It has been recommended by the governments to enforce their mandatory use (Purushothaman *et al.* 2021) <sup>[6]</sup>.

A face mask is a removable, loose-fitting covering that covers the chin, nose, and mouth. It is a simple and inexpensive non-pharmaceutical intervention for safeguarding oneself and stopping the spread of respiratory illnesses. It creates a physical barrier against potentially contagious droplets. Face masks are advised by health organisations all over the world to stop the spread of respiratory illnesses. To have the desired effect, a face mask must be properly applied used. Inappropriate use could promote the spread of respiratory illnesses rather than stop it. Face mask usage etiquette includes using the right application and putting-on methods. The proper use of face mask comprises the correct practise and wearing technique. In order to increase the effectiveness of wearing face masks, health promotion campaigns can benefit from an evaluation of these two factors (Lee *et al.* 2020) <sup>[5]</sup>.

Face masks were initially used to help surgical wounds is protected against staff-generated nose and oral germs. As a result of the COVID-19, governments all over the world have mandated the wearing of masks and other face coverings in places where close contact between people is common and unavoidable. This includes public transportation facilities, retail centres, and workplaces (Abboah-Offei *et al.* 2021) <sup>[2]</sup>. Several attempts have been made to predict the course of the disease in future to be better prepared to fight the pandemic (Behnam and Jahanmahin, 2021; Ketu & Mishra, 2022) <sup>[3,4]</sup>.

We have the ability to safeguard our older family members and protect those closed to us who have underlying health issues. Wearing a mask can reduce threats to our community's essentials workers, including medical personnel, who have shown their commitment to our safety, health, and well-being. By wearing a mask and helping reduced the numbers of individuals who contract the disease, we can ensure fewer people will suffer serious, long-term effects that continue after recovery from the virus. The present research work on "Study on uses of face mask by the people of Jorhat district of Assam" was taken with the following objectives-

1. To know the overall view of wearing a face mask.
2. To study the problems faced by the wearer after wearing a mask.

## Research Methodology

The study was conducted in the Jorhat district of Assam. A multi-stage purposive come random sampling design was followed for selection of villages. A total of sixty eight (68) respondents were selected randomly for the study. The study involves the collection of primary as well as secondary data. The primary data were collected directly from the respondents and constituting the major source of data for the study. For this purpose an interview schedule was prepared for obtaining necessary information. The secondary data relating to uses of mask were collected from the recorded reports i.e. published and unpublished literature and also internet source has been referred to. The collected data were tabulated and analyzed properly in accordance with the objectives of the present study and interpreted with using statistical tools.

## Result and Discussion

### 1. Profile of the respondents

A total of sixty eight (68) respondents were selected randomly from the three villages of Jorhat district of Assam. It was found that 57.35% of the respondents were female and 42.65% respondents were male. Maximum respondents i.e. 52.94% were married and belong to the age group 20 to 30 years. Regarding education qualification it was found that 50% of the respondents were Graduate followed by 19.12% of the respondents were secondary school and master degree passed, followed by 5.88% of the respondents were primary school passed and also 5.88% were found illiterate. It was found from the study that 89.71 respondents were found in good health condition.

### 2. Regular use of face mask

**Table 1:** Distribution of Respondents based on regular use of face mask

Used of Masks	Frequency	Percentage (%)
Yes	68	100
No	0	0

Table 1 shows that 100% of the respondents were using face mask regularly.

### 3. Type of mask used

**Table 2:** Distribution of Respondents based on type of mask used by the respondents.

Type of Mask Used	Frequency	Percentage (%)
Surgical Mask	26	38.24
Respirators	20	29.41
Cloth Mask	22	32.35

Table 2 indicates that 38.24% of respondents were using surgical masks, 32.35% of respondents were using cloth masks and 29.41% of respondents were using respirators (i.e, N95) mask.

### 4. Number of layers preferred in cloth mask

**Table 3:** Distribution of respondents based on the number of layers preferred in cloth mask

No. of Layer used	Frequency	Percentage
Single Layer	28	41.18
Double Layer	40	58.82

Table 3 shows that 58.82% of respondents were preferred double layered mask and 41.18% of respondents were preferred single layered in their cloth mask.

### 5. Type of fabric preferred

**Table 4:** Distribution of respondents based on the type of fabric preferred

Type of Fabric	Frequency	Percentage
Cotton	49	70.06
Cotton blended	19	27.94
Synthetic	0	0

Table 4 shows that maximum respondents i.e. 70.06% were preferred cotton fabric followed by 27.94% were preferred cotton blended fabric for face mask.

### 6. Preferences of comfort and fit in their face mask while wearing

**Table 5:** Distribution of respondents based on comfort and fit in their face mask while wearing.

Comfort and fit in their face mask	Frequency	Percentage
Preferred	100	100.00
Not preferred	0	0

Table 5 shows that 100% of the respondents were preferred comfort and fit in their face mask while wearing.

### 7. Effectiveness of using surgical mask over cloth facial mask

**Table 6:** Distribution of respondents based on effectiveness of using surgical mask over cloth facial mask.

Effectiveness of using surgical mask	Frequency	Percentage
Effectiveness	43	63.24
Not Effectiveness	25	36.76

Table 6 reveals that 63.24% of respondents found surgical mask as more effective than face mask made from clothes.

### 8. Reuse of masks

**Table 7:** Distribution of respondents based on reuse of same masks.

Reused of mask	Frequency	Percentage
Always	12	17.65
Sometimes	46	67.65
Never	10	14.70

Table 7 shows that 67.65% of the respondents reused their mask sometime while 17.65% of them were always reused their mask and 14.70% of the respondents never reuse their mask.

### 9. Frequency of washing cloth mask

**Table 8:** Distribution of respondents on how frequent they wash the mask after using.

Frequency of washing cloth mask	Frequency	Percentage
Always	27	39.71
Sometimes	19	27.94
never	22	32.35

Table 8 indicated that 39.71% of the respondents always washed their mask after using it while 32.35% of the respondents never washed and 27.94% of the respondents sometime washed cloth mask after use.

### 10. Difficulties facing while using the mask

**Table 9:** Distribution of respondents based on the difficulties facing while using the mask.

Difficulties facing while using the mask	Frequency	Percentage
Difficulty in breathing	29	42.65
Anxiety	5	7.5
Skin Allergy	9	13.24
Not at all	25	36.76

Table 9 reveals that 42.65% of the respondents found difficulty in breathing followed by 36.76% of the respondents does not face any difficulty while 13.24% of the respondents found having skin allergy and 7.50% of them had anxiety.

### 11. Wearing of mask reduces the spread of diseases.

**Table 10:** Distribution of respondents based on their concept that wearing of mask reduces the spread of diseases.

Wearing of mask reduces the spread of diseases	Frequency	Percentage
Agree	51	75.00
Somewhat agree	15	22.06
Disagree	2	2.94

Table 10 reveals that 75.00% of the respondents agreed and 22.06% were somewhat agree that the wearing of mask reduces the spread of diseases while 2.94% respondents disagree that wearing of mask reduces the spread of diseases.

### Conclusion

The use of facemask plays a pivotal role in causing significant discomfort in all the participants during its prolonged usage which can limit the efficient usage of facemask, leading to decreased protection. Since facemasks are essential to protect us from COVID-19, certain strategies can be followed to reduce the heat burden due to its prolonged usage such as encouraging nasal breathing, pre-use refrigeration of the respirator.

The proper use of face mask is essential to minimizing the spread of respiratory infections in a community. This study examined the practice and technique of using face mask amongst adults during a non-epidemic state and revealed their unsatisfactory performance. An all-out effort of the researchers, health care professionals, manufacturers and the government will increase people's awareness of the proper practice and technique and enhance the performance of adults in using face mask.

### References

1. Al Arjani A, Nasseef MT, Kamal SM. Application of Mathematical Modeling in Prediction of COVID-19 Transmission Dynamics. Arab J Sci Eng. 2022. <https://doi.org/10.1007/s13369-021-06419-4>.
2. Abboah-Offei M, Salifu Y, Adewale B, Bayuo J, Ofosu-Poku R, Opore-Lokko EBA. A rapid review of the use of face mask in preventing the spread of COVID-

19. International journal of nursing studies advances. 2021;3:100013.

3. Behnam A, Jahanmahin R. A data analytics approach for COVID-19 spread and end prediction with a case study in Iran. Model Earth Syst Environ, 2021. <https://doi.org/10.1007/s40808-021-01086-8>.
4. Ketu S, Mishra PK. India perspective: CNN-LSTM hybrid deep learning model-based COVID-19 prediction and current status of medical resource availability. Soft Computing. 2022;26(2):645-664.
5. Lee LYK, Lam EPW, Chan CK, Chan SY, Chiu MK, Chong WH, *et al.* Practice and technique of using face mask amongst adults in the community: a cross-sectional descriptive study. BMC Public Health. 2020;20(1):1-11.
6. Purushothaman PK, Priyanga E, Vaidhyswaran R. Effects of prolonged use of facemask on healthcare workers in tertiary care hospital during COVID-19 pandemic. Indian Journal of Otolaryngology and Head & Neck Surgery. 2021;73(1):59-65.