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An empirical analysis on consumer's preferences of face mask during COVID-19 pandemic

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Abstract

The protective clothing especially mask has played key role to protect mankind during pandemic days. It protects from infections, air borne diseases and inhibits the transmission of pathogens from one person to another person. A total of 60 respondents including teachers and research Scholars of Sam Higginbottom University of Agriculture, Technology and Sciences, Prayagraj, Uttar Pradesh, India, were selected purposively. Structured Google form was send among respondents to get their awareness and preferences. The study proved that majority of respondents were aware to wear face mask during pandemic, they had knowledge regarding design, and sizes, material and suitable fastening feature available in the market many respondents were showed their preferences towards three layer cotton, eco-friendly, medicated and fragranced face masks.

Keywords: Empirical, consumer's, preferences, during, COVID-19

Introduction

Covid-19 pandemic that first emerged in the city of Wuhan in Hubei province, China has severely affected local industries and livelihood across the world. As it impacts more people every day, most sectors of the economy have been reduced to standstill and apparel and fashion industries in one of the severely hit sector.

The global outbreak of corona virus has created havoc in the fashion industry, trending the face mask as a fashion statement. It has been suggested that possibly no other piece of clothing that has trajectory like face mask sometimes that once worn as fashion statement, have become indispensable amid the corona virus pandemic. The current disruption has shifted fashion brands to make fashionable face masks. Every small unit started manufacturing of face mask in various fabrics, sizes and designs but the functionality of the mask is not sure. WHO guidelines suggest that home made three layer cotton face masks are useful and help in protecting from infection. Variety of masks are available in market like N-95 mask, disposable masks; medicated masks etc. that led to a condition of indecision for selection of a mask. Further these are reusable after washing and also do not cause environmental pollution.

Keeping in mind these points, the present study was planned aiming to know the awareness and consumer's preference for the face mask.

Methodology

Locale of the study

The study was conducted in Sam Higginbottom University of Agriculture, Technology and Sciences, Prayagraj, Uttar Pradesh, India. It was selected purposively due to the easily approachability and familiarity of the area.

Size and selection of the respondents

Sixty respondents including teachers and research scholars were selected purposively for collection of information regarding buying preference of face masks.

Tools for the data collection

A structured questionnaire consisting of three sections was prepared online using Google form <https://forms.gle/y31ZngceLJf3B5he9>.

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The first section covered general and background information of the respondents and second section focused on the information related to awareness and uses of face masks, methods of disposal of masks etc. third section consist of questions related to consumers preferences such as choice of fabric and design features, etc.

Analysis of data

The data obtained from online responses were coded, tabulated and analysed using simple percentage.

Results and Discussion

The results of the study are summarised under following heads.

- General information of the respondents
- Awareness among respondents about face mask
- Preferences of respondents about face mask

The respondents were asked for background information and

the results are reported in Table 1

Age

From the Table 1 revealed that Majority 48.3 percent respondents belongs to 26-35 years of age while rest of 28.3 percent respondents fall in the age group 18-25 years.

Gender

It is clear from table that 66.7 percent respondents were male whereas 33.3 were female.

Education

It was found from table that 36 percent respondents were having education up to post graduation where 28.3 percent of respondents having education up to Graduation and Doctorate.

General information of the respondents

Table 1: Distribution of respondents according to their general information (n = 60)

Respondents	F	%
1. Age (Year)		
18-25	17	28.3
26-35	29	48.3
36-45	10	16.7
46-55	2	3.3
56-65	2	3.3
66 and above	0	0
2. Gender		
Male	40	66.7
Female	20	33.3
Other	0	0
3. Education		
Graduation	17	28.3
Post-graduation	22	36.7
Doctorate and other	17	28.3

F = frequency

Awareness among respondents about face mask

Awareness to wear face mask during pandemic (COVID-19)

Respondents were asked about their awareness for wearing face mask during COVID-19 it was found that all respondents were aware to wear face mask.

Designs of face mask available in the market

Respondents were asked about their awareness towards designs of face mask available in the market it was found that 98.3 percent respondents were aware about availability of different designs of face mask whereas 1.7 percent respondents were not aware about availability of different designs of face mask in the market.

Awareness regarding disposal of mask and its impact to environment

Respondents were asked about their awareness for disposal of mask and it was found that 78 per cent respondents were aware about various methods used for disposal of mask while 22 per cent respondents were unaware about method for disposal of mask it was found that 83.3 per cent respondents had knowledge regarding disposal of mask whereas 16.7 per

cent respondents were not aware about the hazardous impact of face mask.

Awareness of availability of eco-friendly medicated, fragranced and branded face masks in the market

Respondents were asked about their awareness for using an eco-friendly medicated face mask it was observed that 93.3 per cent respondents were aware whereas 6.7 per cent respondents were not aware to use an eco-friendly and medicated face mask. Respondents were also asked about their awareness for availability of medicated masks in the market it was found that 88.3 per cent respondents were reported their awareness whereas 11.7 respondents were not aware to wear if medicated masks are available in market.

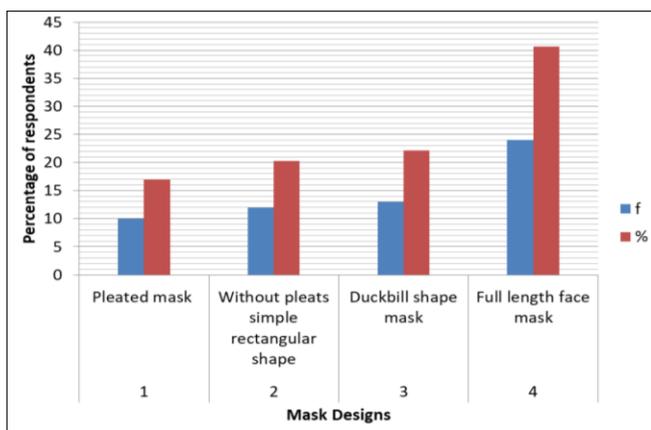
Respondents were asked about their awareness for fragranced mask in the market it was found that 79.7 per cent respondents were aware whereas 20.3 per cent respondents were not aware about that fragranced masks helps to avoid bad smell of mouth also, and respondents were also asked about their awareness towards availability of branded masks it was found that 55.9 per cent respondents were aware whereas 44.1 per cent respondents were not aware about any brand for mask available in the market.

Table 2: Distribution of respondents according to their awareness and preferences (n = 60)

S. No.	Queries	f (Yes)	% (Yes)	f (No)	% (No)
1.	Prefer to wear face mask since pandemic (COVID-19)	57	94.9%	3	5.1%
2.	Various designs are available for face mask	59	98.3%	1	1.7%
3.	Aware about method used for disposal of mask	46	78%	14	22%
4.	Know disposable mask are hazardous for environment if thrown in garbage	50	83.3%	10	16.7%
5.	Would you like to use an eco-friendly and medicated face mask	56	93.3%	4	6.7%
6.	If medicated masks are available in market would you like to wear it	53	88.3%	7	11.7%
7.	Fragrance (Perfume) in mask to avoid bad smell of mouth also	48	79.7%	12	20.3%
8.	Do you aware about branded mask	34	55.9%	26	44.1%

f = frequency

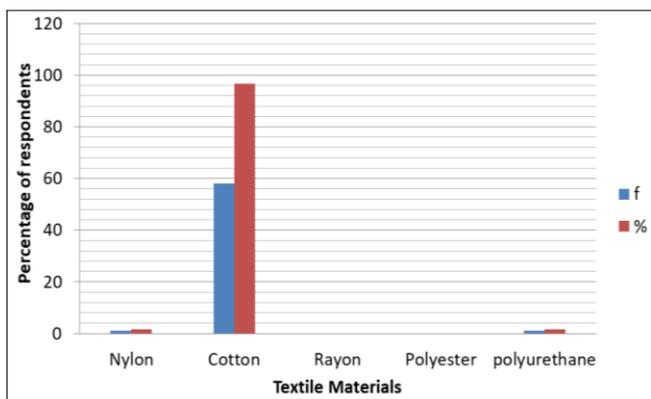
Preferences of respondents about face mask



(n = 60), f = frequency

Fig 1: Distribution of respondents on the basis of preferences of mask designs

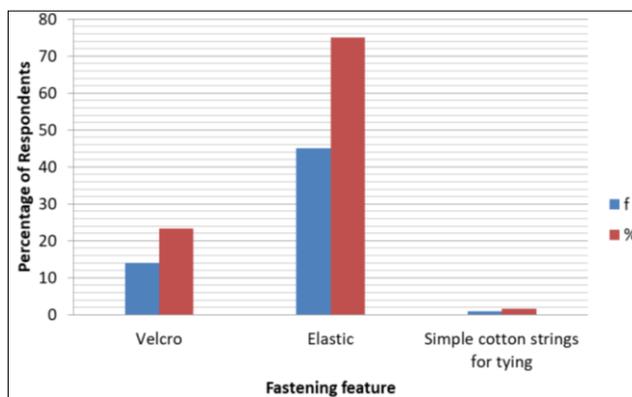
Respondents were asked about their preference for designs of mask and results are reported in figure-1. 40.7 per cent respondents showed their preference for Full length face mask while 22.1 per cent respondents preferred duckbill shape mask, 20.3 per cent respondents preferred without pleats mask and 16.9 3 per cent respondents preferred to wear Pleated mask.



(n = 60), f = frequency

Fig 2: Distribution of respondents on the basis of preferences for textile materials for mask designs

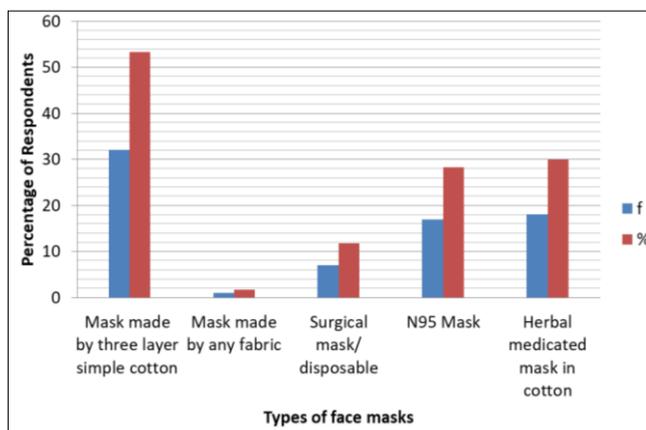
Respondents were asked for their preferences for textile material they like to have for their masks and it was found that 96.6 per cent respondents preferred cotton fabric for mask as it is breathable and more absorbent where 1.7 respondents preferred nylon and polyurethane fabric for their masks.



(n = 60), f = frequency

Fig 3: Distribution of respondents on the basis of preference for fastening feature in mask

Respondents were asked for the preferences of fastening features in the face mask. It was found that 75 per cent respondents preferred elastic as fastening feature in their face mask whereas 23.3 per cent respondents preferred Velcro as fastening feature in the mask and 1.7 per cent respondents preferred simple cotton string as fastening feature in mask.

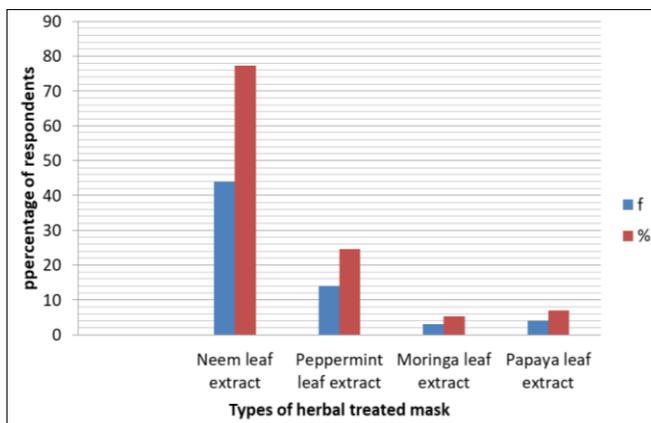


(n = 60), f = frequency

Fig 4: Distribution of respondents on the basis of preference of type of face mask

Respondents were asked about their preference on the basis of types of face masks available in the market and it was revealed from figure 4, that 53.3 per cent respondents prefer mask made by three layer simple cotton fabric where 30 per cent respondents were prefer herbal medicated mask in cotton material, 28 per cent respondents were prefer N95 mask, 11.7 per cent respondents prefer surgical mask/disposable and 1.7 per cent respondents prefer mask made by any fabric.

Kabindra (2016) [4] reported in his study Evaluating the efficiency cloth face mask in reducing particulate matter exposure that small particles are generally considered harmful than large particles because of their ability to penetrate to human bronchi and lungs. Cloth mask are popular among people of developing countries because of their low cost and its easy availability due to its reusable nature



(n = 60), f = frequency

Fig 5: Distribution of respondents on the basis of preference for type of herbal treated mask

Respondents were asked about their preference for herbal treated face mask. According to figure 5, 77.2 per cent respondents prefer mask treated with *Neem* extract, 24.6 per cent respondents prefer mask treated with Peppermint extract, 7 per cent respondents prefer mask treated with papaya leaf extract and 5 per cent respondents prefer mask treated with Moringa extract for imparting antimicrobial quality in their masks.



(n = 60), f = frequency

Fig 6: Distribution of respondents on the basis of preference of construction method used in textile material used for making mask

Respondents were asked about preference of construction method used in textile materials which were used for making mask. According to figure 6, 41.7 per cent respondents showed preference towards woven fabric, 33.3 per cent respondent's preferred knitted fabric, 25 per cent respondents showed preference towards non-woven textiles whereas 11.7 per cent respondents showed preference towards felted and laminated fabric.

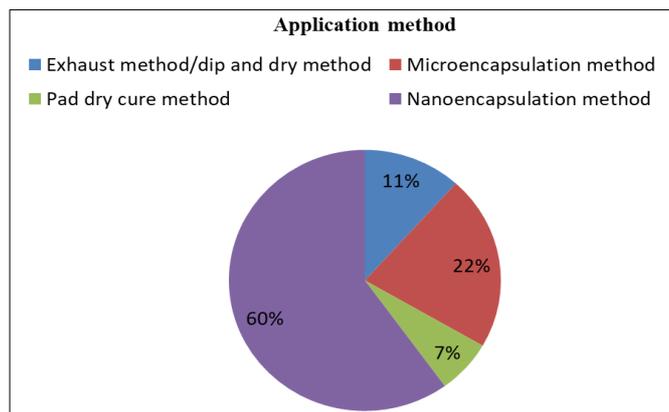
Consumer preferences for layers, textile material in inner layer, wash cycles of face mask

Respondents were asked about their preferences on the basis of number of layers used in make mask it was found that 76 per cent respondents preferred 3 layered mask, 23 per cent

respondents showed preference for 2 layered mask, 5 per cent respondents showed preferences for the both 4 layered and 5 layered mask.

Respondents were asked about their preferences on inner layer used in mask making it was found that 93 per cent respondents showed preference for cotton fabric, 3 per cent respondents preferred polyester fabric whereas 2 per cent respondents preferred for both silk and wool fabric in inner layer in mask.

Respondents were asked about their preference for wash cycles of mask. It was found that 54 per cent respondents showed preference for 50 wash cycles, 18 per cent respondents showed preference for 80 wash cycles, and 17 per cent respondents showed preference for 100 wash cycles whereas 11 per cent respondents showed preference for 120 wash cycles.



(n = 60)

Fig 7: Distribution of respondents according to their preference for application methods for medicated masks

Respondents were asked about their preference for application method suitable for medicated masks, 60 per cent respondents were showed preference towards Nanoencapsulation for application of antimicrobial property in medicated masks, 22 per cent respondents were showed preference towards microencapsulation for application of antimicrobial property in medicated masks, 11 per cent respondents were showed preference towards Exhaust method/dip and dry method for application of antimicrobial property in medicated masks while 7 per cent respondents were showed preference towards Pad dry cure method for application of antimicrobial property in medicated masks.

Consumer preference for lab testing and cost of mask

Respondents were asked about their preference for lab tested mask it was found that 60 per cent respondents were showed preference for any textile testing lab, 22 per cent respondents were showed preference for NITRA (Northern India Textile Research Association), 11 per cent respondents were showed preference towards SITRA (South India Textile Research Association) and 7 per cent respondents were showed preference for SASMIRA (Synthetic & Art Silk Mills Research Association).

Respondents were asked about their preference of purchase medicated and fragranced mask it was found that 54 per cent respondents preferred to purchase in 80 rupees, 31 per cent respondents preferred to purchase in 100 rupees, 10 percent respondents preferred to purchase in 120 rupees and 3 per cent respondents preferred to purchase 150 rupees whereas 2 per cent respondents preferred to purchase of medicated and fragranced mask in 160 rupees.

Conclusions

It can be concluded from the present study that majority of respondents were well aware about the mask wearing practice during covid-19 pandemic they had knowledge regarding designs available in the market, types material used for making face mask. Regarding their preferences three layer cotton face mask with elastic was mostly preferred by the respondents. Many respondents showed their preferences towards eco-friendly, antimicrobial finished, fragranced and lab tested face mask at lower price. Therefore the study is useful for the entrepreneurs, and business man how are willing to start their business can use these data.

References

1. Cohen J, Kupferschmidt K. Countries test tactics in 'war' against COVID-19. *Science* (New York, N.Y.) 2020;367(6484):1287–1288.
<https://doi.org/10.1126/science.367.6484.1287>
2. Condon BJ, Sinha T. Who is that masked person: The use of face masks on Mexico City public transportation during the influenza A (H1N1) out-break. *Health. Policy* (Amsterdam, Netherlands) 2010;95(1):50–56.
<https://doi.org/10.1016/j.healthpol>.
3. Edward SK, Raphael SS, Alexander MD, Gernot JM, Kristian ORM, Michael W. Consumers and COVID-19: Survey Results on Mask-Wearing Behaviours and Beliefs. *Economic commentary* 2020, P6.
4. Kabindra SM, Alyssa N, Rand KJ, Richard PE. Evaluating the efficiency cloth face mask in reducing particulate matter exposure. *Journal of exposure science and environmental epidemiology* 2016, P1-6.
5. Tateo L. Face masks as layers of meaning in times of COVID-19. *University of Oslo, Norway Culture & Psychology* 2020, P1–21.