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Research Article

Face Mask Wearing Behaviour Among College Students: A Small Pilot Study

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Abstract

In the beginning of COVID-19, the use of face masks was made compulsory, and it has become an inevitable part of our lives. This has also induced major changes in the behaviour of the people. Face masks are used to protect us from the SARS-CoV-2 virus that causes COVID-19. It can also be used to prevent disease transmission through the nose and mouth. Face mask behaviour refers to the process of wearing masks that alters people's behaviour while also protecting them from COVID-19 (Kabir, K.M.A., Risa, T., and Tanimoto, J., 2021). This study aimed to investigate the face mask behaviour of college students after COVID-19. The study was qualitative in nature and used an exploratory research design and ex-post facto research design. The data were collected through the focus group discussion, and the sample size was 11, out of which 3 were males and 8 were females. In focus group discussion, the questions that were asked was predetermined. The result indicated that there was an increase in the students' confidence level, people wore the mask for their comfort and to reduce other people's judgements about them.

Keywords: face mask wearing behaviour; face mask and COVID-19; mask; and behaviour

Introduction

Covid 19 is an acute respiratory disease (Mboowa et al, 2021). Covid-19 is a virus that is caused by SARS-CoV-2 and causes severe symptoms and deaths in some cases. COVID-19 pandemic began in December 2019 in China. Death due to COVID-19 is more common among the elderly and people with major health issues. Before COVID-19, the use of mask was only mandatory for medical assistants and those who had respiratory diseases. But in the current scenario, which is in the presence of COVID-19, has completely changed the situation that made mask-wearing behaviour universal. Face mask behaviour is a behaviour in which people use masks, and it has become an interminable part of life rather than just for protection. People use masks to match the colour of their outfit. Some people do not wear the mask to show off their makeup, while others do not even remove the mask. The study was conducted among the population of college-going students. College-going students are full-time or part-time students who are attending the institution. Face mask not only have a direct positive medical impact in terms of preventing the virus from spreading to those who are not vulnerable (Wu and McGoogan, 2020). They also have a positive societal effect, as wearing a mask allows for the relaxation of other preventive measures such as strict isolation and quarantining (Minszewski et al. 2014). Wearing a mask has both positive and negative effects. The positive effects are the prevention of disease transmission, and the negative effects include reduction in confidence, a decrease in communication skills, and a decrease in interpersonal relationships. Other disadvantages of wearing a mask includes a difficulty

in reading other people's facial expressions and a decrease in trustworthiness. Dark personality traits are morally disengaged to avoid self-censorship for not wearing masks, despite their mandatory use as a health measure, in the context of the second wave of the COVID-19 pandemic (Ventura G.C. et al. 2022). Though the use of a mask is mandatory, not all people wear one, especially those with negative personality traits who are fond of violating the rules. Gender did have a significant relationship with face mask perception; however, men were more likely to perceive face masks as infringing on their independence, whereas women were more likely to perceive face masks as uncomfortable (Howard, C.M. 2020). The appropriate selection types need to be improved in disposable surgical mask-wearing behaviour, how to fit the mask entirely onto the face, how hands should not touch the masks external surface while wearing it or removing it, the replacement time and storage method for reuse of disposable surgical masks should be particularly emphasized in future behavioural change interventions. We need to enhance targeted health promotion activities for different groups to promote residence correct mask wearing behaviours and built the first defensive line of community prevention and control (Tang H et al 2022)

Age and gender played a significant role in participants' adherence to the use of face masks. The desire to continue participating in their businesses in order to generate income for the provision and sustenance of their family's needs was a major factor contributing to non-adherence on the use of the mask (Olowoyo, M.M. 2022). In a study conducted by (Tateo

et al 2021), it was seen that people wore masks for their safety and out of their fear of affecting COVID-19. The study also implicated that masks have become an inevitable part of life, and their meaning about masks, that is, that they should only be used by medical practitioners, has also changed, so people have started to use them.

In a study conducted by (Kaewpan et al. 2022), it was indicated that gender, age, and career did have a significant impact on wearing a mask, while people's level of education, smoking, and comorbidity with a disease did not have any significant relationship with their face mask wearing behaviour.

Review of Literature

Kaewpan.W. et al. (2022) conducted a study on "Factors affecting face-mask wearing behaviour to prevent COVID-19 among Thai people: A binary regression model." The study discovered that gender, age, and career were statistically significant, whereas level of education, smoking, and comorbid disease were not statistically significant in terms of Thai people's face mask wearing behaviours. Jarnig.G et al. (2022) conducted a study on "how middle and high school students wear their face masks in classrooms and school buildings." The study indicated that mask-wearing behaviour should be encouraged more among middle and high school students for the future prevention of COVID-19. Ventura, G.C., et al. (2022) conducted a study on "moral disengagement, the dark triad, and face mask wearing during the COVID-19 pandemic." The study found that people who have the dark triad personality trait showed moral disengagement when using a face mask. People with negative personality traits do not wear masks. Paichitrojjana.A. and Chalermchai.T. (2022) conducted a study on the "prevalence and related factors of acne exacerbation and face mask wearing during the COVID-19 pandemic." The study indicated that there is a relationship between face mask wearing and mask exacerbation, and it was also seen that duration of mask wearing and age have a significant role in acne exacerbation. C.M. Howard (2021) conducted research on the "relationships between age, face mask perception, and face mask wearing. " In this study, the researcher could not conclude an accurate answer related to face mask perception. It is said that there must be other associates to find out more about this relationship. The researcher also found that age does not have any relation to face mask perception, and he concluded that older adults are less likely to wear the mask when compared to younger individuals. G. Gabrieli and G. Esposito (2021) conducted a study on "perceived trustworthiness while wearing a face mask."The study indicated that there is no relationship between perceived trustworthiness and aesthetic appearance, and it was seen that there is no influence of ethnicity or gender, but that age had an influence on perceived trustworthiness while wearing the mask. Kwan et al. (2021) conducted a study on "face mask behaviour, depressive symptoms, and health beliefs among older people during the COVID-19 pandemic." The study concluded that there was a relationship between health and face mask behaviour but no relationship between depressive symptoms and face mask behaviour. It was also observed that older people with moderate to strong health beliefs who had previously taken fewer preventive measures showed depressive symptoms when they reused the mask. Looi, H.K., et al. (2021) conducted a study on "demographic and hygienic factors as predictors of face-mask wearing during the COVID-19 pandemic in Malaysia." The study concluded that gender factors such as gender, handwashing, and wearing of personal protection equipment are predictors of facemask wear. Davis, R.E. et al. (2021) conducted a study on the "conceptualization of college students' COVID-19-related mask wearing behaviour using the multi-theory model of health behaviour change." The study found that those college students who violate the guidelines for wearing masks should be educated through MTM. Tucho, G.T., and Qmsa, D.M. (2021) conducted a study on "universal use of masks and related challenges during COVID-19 in developing countries." The study concluded that the face mask should be available to all and that people should be educated about the proper use and disposal of the mask.

Labero, Y.M., and Abame, D.E. (2021) conducted a study on "knowledge, attitude, and practises of face mask utilisation and associated factors in the COVID-19 pandemic among Wachemo university students, southern Ethiopia." This study found that while attitudes and practise were high in Southern Ethiopia, knowledge about face masks was low. This study implies that authorities in particular areas should be concerned about raising public awareness about the COVID-19 pandemic. Carbon, C.C. (2020) conducted a study on how "wearing face masks strongly confuses counterparts in reading emotions." According to the study, reading facial expressions was difficult, and the mask's presence was irritable. It was also concluded that people tend to misinterpret the emotional expressions of other people. Mheidly, N., et al. (2020) conducted a study on the "effect of face masks on interpersonal communication during the COVID-19 pandemic." The study indicated that using a face mask hinders facial expressions during communication and interpersonal relationships. Mboowa et al. (2020) conducted a study on "face masking," an acceptable protective measure against COVID-19 in Ugandan high-risk groups. It was found that the people in Uganda had a positive attitude towards face masks as part of COVID-19.

Rationale of the Study

Wearing masks during COVID has become a popular trend among the general public. Since wearing masks has been an emerging trend, this study is of great relevance. The relevance of the study indicated that, back then, the number of COVID cases increased, and as a result, the number of deaths was also at a higher rate. One of the preventive measures against COVID was to wear a face mask. The government had made it a mandatory rule to wear the mask while travelling or going out of the house. COVID cases are decreasing these days, and the government has removed the mandatory mask requirement. People, however, continue to wear the mask because it has become a part of their lives.

People usually used to wear masks to protect themselves against COVID, but now people are using masks to hide themselves. By doing so, they think that their confidence level increases, which helps them face situations without showing their faces. This clearly shows that people before COVID-19 were confident enough to face situations without a screen, but now the context has changed. Even though people became more confident while wearing the mask, their communication skills have also decreased rapidly.

This study is being conducted to learn about the face mask wearing habits of college students. This study was conducted to know the student's opinion about the mask-wearing behaviour. It was also conducted to know more about their feelings and difficulties about wearing masks.

Method

Statement of the problem

To find out the impact of face masks on the behaviour of college students after the spread of COVID-19.

Objectives

- To study the impact of COVID-19 on college students.

- To study the impact of face masks on the behaviour of college students.

- To look into the relationship between face mask use and other psychological variables.

Research Design

The study was exploratory in nature, and for the preliminary investigations concerned, the study conducted as a pilot study. Before conducting a large study, it is necessary to plan and modify a small sample (Simkus, 2022). The objective of exploratory research is the development

of hypotheses rather than their testing. Qualitative research a is research where the researcher is "interested in analysing the subjective meaning or social production of issues, events, or practises by collecting non-standardised data and analysing texts and images rather than numbers and statistics" (Flick, 2009, A.K. Singh, 2019). This study included multiple research designs such as qualitative and exploratory.

Sample size and sample description

The data collected for the study was through the focus group discussions. The focus group discussion consisted with 11 participants, of which 3 were males and 8 were females. The information was taken from the college students, who were first-year UG students. The number of students that wore masks continuously was 8, and the number of students who did not wear masks was 3. The students belonged to different socioeconomic statuses. Purposive sampling was used to collect the data.

Tools

Focus group discussion

A focus group discussion is a small group discussion that consist of 6 to 12 members to discuss about the topic under study. This discussion is controlled by moderator and a co-moderator. It is qualitative research and the questions generally asked the members were based on their belief, opinion, attitude, perception and ideas. The information required was collected using the focus group discussion. Comparing with other research methods participants were free to share their opinion (Dr Susheel Baral, Sudeep Uprety and Bipul Lamichhane, 2016) A focus group discussion is part of a semi-structured interview.

Data analysis technique

Thematic Content Analysis

Thematic content analysis is a type of qualitative research which is used to identify, and analysis different themes of the data (Braun and Clarke, 2006). Thematic content analysis was used to examine the data. The thematic content analysis is used for analysing data and identifying the common themes present in the data. The procedure involved in thematic content analysis begin with the researcher becoming familiar with the collected data. The second step involved is coding, which focuses on the main words said by the respondents. The third step involves identifying the themes in the data. The fourth step involved is reviewing the themes, which involves identifying new themes, combining some themes, or rejecting some themes. The fifth step is defining and naming the themes, and the last and final step is writing down the analysis of the data. Thematic Content analysis analysed the themes identified by the responses of the participants.

Procedure

The participants were seated comfortably, and rapport had been established. Moderator and co-moderator. The moderator (HKV) asked questions to the participants while the co-moderator (BT) recorded their given responses.

The information was collected by conducting a focus group discussion among the students. The consent to record the information given was taken from the students, and they were told that their information would be kept confidential. They were asked to sit in a circle and were asked some predetermined and some spontaneous questions, to which they responded. The data collected was analysed through thematic content analysis. The responses of the respondents were taken in verbatim.

The first step in thematic content analysis, transcription, was done by the moderator (HKV). It involved transferring the recorded information onto paper and reading the information to get an idea of the information collected. Step two included the processes of checking and editing, which were carried out by the co-moderator (BT). This step involved the

condensation of the information collected into smaller units. This process was done by reading the transcript data, and all the similar themes were grouped together. The third step involved in thematic content analysis includes the analysis and interpretation of the themes. This step included the interpretation of the themes in their psychological meaning, and it was done by both the moderator and co-moderator together (HKV and BT). The fourth step, which is the process of generalization, was also carried out by both the moderator and co-moderator together (HKV and BT), and it involved identifying the differences and similarities, which were also grouped into paragraphs. The fifth and final step in thematic content analysis involved the process of validation. This process was carried out by the third researcher (ST), and this step involved checking the transcripts to validate them, and then the central theme was identified.

Ethical concerns

The respondents were assured of the confidentiality of the information collected and that their identities would not be revealed. The participant's consent was obtained before collecting the participant's data.

Results and discussion

The study sought to discover college students' use of face masks. Face mask behaviour is a behaviour in which people continue to wear masks not only because of COVID but also because it has become a part of their lives that cannot be changed. The method used to collect the information was focus group discussion. The data collected later was analysed through thematic content analysis. According to the data collected, people wore masks not only to protect themselves from COVID, but also to boost their confidence as they became accustomed to wearing the mask. It was also seen that the participants wore masks for comfort. The respondents also reported that they use the mask to hide the participants' facial expressions from others. The participants were scared that others might judge the respondents' faces.

According to the data collected, participants wear masks out of habit, and respondents wear masks because the participants feel incomplete without the mask.

It could be seen that the communication problems increased while the mask was being worn. A study discovered that wearing a mask has an effect on interpersonal communication (Mheidly, N. et al., 2020). The respondents also reported that wearing a mask was irritable as well as suffocating (Carbon, C.C.C., 2020).

Report on Themes

After the information was collected, the data was analysed through thematic content analysis. The researchers had identified the following themes: emotion and affect, action behaviour, communication, habit, prevention, interest, confidence, and cognition. The themes according to which the information was analysed were:

Emotion and affect

Participants reported feelings of discomfort, suffocation, irritation, tiredness, and nose pain. The participants reported that they felt uncomfortable wearing the mask when they saw other people wearing it. The participants reported that they felt curious to see the other people's faces. When the participants were asked to remove the mask, one of them reported that the participant felt like laughing, thinking about what others would think of her. A participant also reported that the participant felt safe when the subject wore the mask. A participant reported that the participant wore a mask out of fear of higher authority. A participant reported that the participant became nervous when the participant was in crowded places without the mask.

Action behaviour

The participant reported that she wore a mask under the influence of her parents. The participant reported that wearing the mask was difficult at first, but he eventually got used to it. The subject reported that the participants wore the mask in crowded places, especially while travelling. Some of the participants reported that they do not wear the mask at home but only in college. The participant stated that it is simple to go out without brushing one's teeth while wearing the mask. Some participants responded that in some situations it is easy to commit academic dishonesty, while others responded that it is difficult to cheat in an exam with a mask on. The participants would sometimes remove the mask and introduce themselves to others. Participants reported that they remove the mask and introduce themselves to some people, while others reported that they introduce themselves later without remembering that the mask is on, removing the mask while realising that the participant is wearing the mask. The participants reported that they would not continue to wear the mask if the government removed the rule completely.

Communication

The participant reported that they could communicate with or without the mask, but the sound was reduced, and they could maintain eye contact with or without the mask. It was reported that the participants' confidence level to communicate increased when they wore the mask.

Habit

A participant stated that she was accustomed to wearing the mask constantly and felt lonely when she was not wearing it.

Prevention

The participants reported that they wore the mask to protect themselves from COVID. A participant reported that the participant wore the mask as the participant interacted with people who were physically weak. Some participants, particularly health-conscious individuals, were said to have worn masks to protect themselves from various diseases.

Interest

A participant reported that the participant wore the mask for personal interest and comfortability. The majority of the participants were interested in taking photos with the mask on, while others were interested in taking photos without the mask.

Confidence

The confidence level of the participant slightly increased when the participant responded to questions in the class while wearing the mask. The participant reported that the participant wore the mask because the participant does not have confidence in the participant's appearance. When they had to communicate some frightening things, the participants' confidence level increased. The participants found it moderately easy to communicate with or without the mask. A participant reported that it was easy to smile while wearing a mask. The participant reported that she felt confident while on stage with her mask on and also in crowded places. The participants felt confident enough to introduce themselves with masks on.

Cognition

The participant reported that the subject felt incomplete without the mask since they had worn it for a long period of time and were used to it. The participants also reported that they tended to perceive the face as complete when people wore the mask. A participant reported that the facial expression would remain hidden when people wore the mask. Participants reported that they initially imagined the other's face but later realised it was not as they imagined. The participant reported that the participant wore the mask just by thinking about the authorities. Some participants reported that there was not much difference with or without the mask. Some of the participants reported that they do not wear the mask at home but only in college. Some participants reported that they would remove the mask and introduce themselves when the other person claimed that they could not identify the participant. The participants reported that they would not continue to wear the mask if the government removed the rule completely.

Conclusion

It would be concluded that wearing a mask increases the respondent's confidence, decreases their communication skills, and also affects their interpersonal communication. Continuous use of the mask had a major impact on the participants' overall personalities before and after COVID. This trend could be seen in the upcoming years because, even though the number of cases was limited during these months, participants still wore masks for their comfort.

Strengths and Limitations of the Study

Strengths

- The responses of all the respondents were recorded.

- The questions that were asked were predetermined.

- The responses collected were from both respondents who wore masks and those who did not.

Limitations

- The information collected came from a limited number of students.

- The students responded by hearing other students; thus, the response had conformity.

- The participants were distracted by the participants' environment.

- The Sample Size was small.

Implications

The study was conducted to know why students wore masks even after the mandatory government requirement of wearing the mask was removed and when the number of cases decreased. The study found that there is a change in the respondent's confidence when they are wearing the mask.

The Scope of Future Research

Further research can be conducted in different populations and with different variables in addition to face mask wearing behaviour. This study could be done in other areas of India.

The population chosen for any further study could be from any occupational sector, from any age range, or from any community.

Declarations

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Conflicts of interest/Competing interests

The authors have no financial or non-financial interests to report.

Data Availability Statement

Only datasets produced during and/or analyzed during the current investigation are available upon reasonable request from the corresponding author.

Authors' contributions

The three writers have each made a meaningful contribution and agree that they should both be given authorship credit.

Ethics approval

The Departmental Research Committee granted ethical approval.

Consent to participate

Informed consent was taken from the informant.

Consent for publication

All authors of this research Study consent to the work being used for publication.

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The article, Face Mask wearing Behaviour among College Students: A Pilot Study, is a record of original research effort, we therefore declare. We attest to the work's originality and the absence of any instances of plagiarism across the whole manuscript.

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