

General Awareness and safety measures to combat COVID-19

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Abstract

Corona virus Disease 2019 (COVID 19) is caused by a novel corona virus which is known as Severe Acute Respiratory Syndrome corona virus 2(SARS COV-2), affected the entire world. Countries has developed various strategies to prevent the spread of Covid-19.WHO has issued guidelines for the awareness and the preventive measures to fight Covid-19.Geriatric Patients and those suffering from co-morbidities like heart disease, lung disease and diabetic patients, are at higher risk of developing corona virus disease 2019 illness. The study was a Prospective Observational study. The study was conducted between 10th august 2020 and 31st august 2020.A self-made questionnaire was administered and circulated the questionnaire through Social Media. A total no of 264 participants were participated in our study, Statistical analysis of our study shows that about 98.48% participants were using Facemasks and majority of the particssipants were following the basic precautionary measures.

Keywords: Covid-19, hygiene, hand sanitizers, mask, global pandemic, general awareness

Introduction

Corona virus Disease 2019 (Covid 19) is caused by a novel corona virus which is known as Severe Acute Respiratory Syndrome corona virus 2(SARS COV-2), affected the entire world. The first Covid-19 disease was found in December 2019 in WUHAN, Hubei Province, China; within a few week, it spread in the whole country. About 200 countries around the world have been reported several numbers of Cases, It includes United states, India, Spain, Italy, Germany, France, Iran Etc. WHO soon declared Covid-19 outbreak as a global pandemic and public health emergency globally ⁽¹⁾.This disease spreads through human contact and has high threats in public. Novel Corona virus is a highly contagious disease and spread primarily through respiratory droplets, Currently there is no specific treatment available for Covid-19.Covid 19 had caused more than 35,464,000 confirmed Cases and killed at least 1,042,900 worldwide up to the 5th October, 2020. The number of confirmed cases as well as the number of death will increased more in coming days.Covid-19 affects different people in different ways. Most infected people will develop mild to moderate illness and recover without hospitalization. Most common symptoms of Covid-19 diseases are Fever, dry-cough, difficulty in breathing, tiredness. Sign and Symptoms of corona virus disease 2019 may appear 2 to 14 days after appear. Countries has developed various strategies to prevent the spread of Covid-19 ^[2].

WHO has issued guidelines for the awareness and the preventive measures to fight Covid-19.Geriatric Patients and those suffering from co-morbidities like heart disease, lung disease and diabetic patients, are at higher risk of developing corona virus disease 2019 illness.

The basic preventive measures needed to be taken until an effective treatment or vaccine is developed ^[3,4].

Aim & Objective

The aim of the study is to assess the knowledge and awareness regarding the safety issue precaution needed to be taken to combat Covid-19

Methodology

The study was a prospective Observational study. The study was conducted between 10th august 2020 and 31st august 2020. A self-made questionnaire was administered and circulated through Social Media. Our study was cost effective and time saving. The participants shows enough interest to give responses of our questionnaire. Participants who have smart phones or computers with internet connection have participated in our study, Total, 264 responses were recorded and analyzed. The study was conducted for a period of 21 days. The questionnaire was developed using WHO guidelines, Ministry of Health and family welfare guidelines (5, 6). The questions consisted of basic preventive measures to combat Covid-19 virus. The questions were prepared in a Google form and circulated for 20 days. The response was recorded and analyzed using software's like Microsoft Excel.

Result

Among 264 participants, Most of them were college students.

Majority of these participants (98.48%) were following the safety measures and precautions suggested by the ministry of health and family welfare and WHO.

Patient Age Distribution

From statistical analysis, It shows that the no of participants of below age 18 is 10,194 participants are belongs to age group between 18-27, 28 participants are belongs to age group "between" 28-37, 27 participants are belongs to age group between 38-47 and 5 participants are belongs to age group 48 and above.

Table 1: Patient's demographic details

Age group	Number of participants
Below 18	10
18-27	194
28-37	28
38-47	27
48 and above	5

Our studies shows that around 37.9% participants were using N-95 masks, 25% participants were using surgical masks, 14% participants were using N-95 masks with respiratory valve, and rest of the participants were using Cotton masks, Handkerchief and others.

Table 2: Which type of mask do you use while going out?

Type of mask	Total count	Percentage
N-95	100	37.88%
N-95 with respiratory valve	37	14.02%
Surgical mask	66	25%
Cotton mask/Handkerchief	53	20.08%
Others	8	3.03%

Statistical analysis shows that about 74.24% participants were aware about that N-95 mask with respiratory valve.

Table 3: Do you know that use of N-95 mask with respiratory valve is not safe and effective against Covid-19.

Option	Total Count	Percentage
Yes	196	74.24%
No	68	25.76%

Around 88.64% participants were regularly use hand sanitizer (60% V/V alcohol) and rest of 11.36% participants were not regularly using hand sanitizers for sanitizing.

Table 4: Do you regularly use hand sanitizer (over 60% V/V alcohol) for sanitizing?

Option	Total Count	Percentage
Yes	234	88.64%
No	30	11.36%

Our studies shows that around 98.48% participants were aware about safety measures and precautions suggested by the ministry of health and family welfare and WHO.

Table 5: With daily spike in Covid-19 cases in India, are you following the safety measures and precautions suggested by the ministry of health and family welfare & WHO?

Option	Total Count	Percentage
Yes	260	98.48%
No	4	1.52%

According to our study, statistical analysis shows that 63.64% participants were aware about that community

Transmission has been started in India and 29.55 % participants were not sure about this.

Table 6: Do you think that community transmission started in India?

Option	Total Count	Percentage
Yes	168	63.64%
No	18	6.82%
May be	78	29.55%

There are so many cheap quality sanitizers which contain methanol are available in the market, which is harmful for the health. According to our study statistical analysis shows that 89.77% participants were aware about this and rest 10.23% participants were have no knowledge about sanitizers.

Table 7: Are you aware that, cheap quality (fake) and methanol containing sanitizers are sold in the market, which is harmful for your health?

Option	Total Count	Percentage
Yes	237	89.77%
No	27	10.23%

With the ongoing pandemic our study shows that about 32.20% participants were carrying out the daily activity (Eg. Work, School, College, Market etc.)

Table 8: With the ongoing pandemic are you comfortable to step out of your home and carry out daily activities? (E.g. Work, School, College, Market etc).

Option	Total Count	Percentage
Yes	85	32.20%
No	179	67.80%

It is necessary to sanitize and clean our home and workplace with disinfectant spray or liquid (Eg Dettol, Lysol etc). Around 87.88% participants were carrying out this activity whereas 12.12 % participants were said "No" to these activity.

Table 9: Are you sanitizing your home and workplace regularly with disinfectant spray or liquid? (E.g. Dettol, Lysol etc).

Option	Total Count	Percentage
Yes	232	87.88%
No	32	12.12%

Around 90.15% participants were used to sterilize their mask after using with Warm water and salt or with Disinfectant liquid whereas 9.85% participants were not carrying out these activities.

Table 10: Do you sterilize/Wash your mask after using? (With warm water and salt or with disinfectant liquid)

Option	Total Count	Percentage
Yes	238	90.15%
No	26	9.85%

Around 37.66% participants were taking all the precautionary measures. (Eg. Masks, Gloves, Hand sanitizers, Face shield) to combat against Covid-19.

Table 11: What are the precautionary measures you are taking to combat against Covid 19?

Option	Total Count	Percentage
Masks	106	22.55%
Gloves	55	11.70%
Hand Sanitizers	104	22.13%
Face Shield	28	5.96%
All of the Above	177	37.66%

Discussion & Conclusion

A total no of 264 participants were participated in our study, Statistical analysis of our study shows that about 98.48% participants were using Face masks that includes N-95 masks, N-95 masks with valve, cotton masks, surgical masks etc. Our study was similar to Rina Tripathy, *et al*, there study shows that around 86.5% participants were using face masks, use of face masks was mandated by many countries around the globe and considered as one of the primary preventive measure to combat against Covid-19. This study was similar to Ashis Kumar, *et al*, there study shows that around 97% participants were using face masks. Result of our study shows that around 32.20% participants were used to move outside of house during this pandemic situation. Use of hand sanitizers or frequently washing hands with soap and water is a standard hygiene practice and an effective solution to prevent Covid-19. Similar studies were conducted by Ashis Kumar, *et al*, there study shows that around 96.7% participants were using hand sanitizers. As the current situation of this pandemic Covid-19 became bad to worse, It is important to improve the awareness in our society, and also to provide information about preventive measures for Covid-19. During this pandemic situation, most of the students were aware about this pandemic and the preventive measures need to be taken to combat Covid-19¹. The Majority of the student of our society are using N-95 mask, as most of the student from medical background so along with N-95, also they are using surgical mask. Study reveals that the participants were also aware about that N-95 mask with respiratory valve is not so much effective against Covid-19. Frequent use of Hand Sanitizers is an effective way to prevent transmission of Covid-19 along with other viruses, majority of the participants were regularly using hand sanitizer (60% v/v alcohol or above) for sanitizing their hands. Self-precaution is now the key to combat against this virus until an effective treatment or vaccine is developed participants (98.49%) were following the safety measures and precautions as prescribed by the health and family welfare and WHO. Use of Masks and washing of hands with soap and water or Hand sanitizers is a basic and effective method. This study also reveals that the participants were aware about self-precaution and the various methods recommended by the governing bodies to fight against this virus, which includes disinfecting the work place and areas where contact of hands, are often using various disinfectants. Awareness programs by the governing authorities as well as the healthcare professionals spread the message in the community regarding self-hygiene and preventive measures. The pandemic has effected almost every corner of the globe and the basic preventive measures has helped and proven to be effective.

Reference

1. Singh AK, Agrawal B, Sharma A, Sharma P. Covid- 19: Assessment of knowledge and awareness in

Indian society. Journal of Public Affairs. 2020; 1:e2354.

2. Tripathi R, Alqahtani SS, Albarraq AA, Meraya AM, Tripathi P, Banji D, *et al*. Awareness and Preparedness of Covid-19 Outbreak Among Healthcare Workers and Other Residents of South-West Saudi Arabia: A Cross-Sectional Survey. *Frontiers in Public Health*, 2020, 8. doi:10.3389/fpubh.2020.00482
3. Asish Kumar Saha. Need for Recognition of Pharmacists as Front Liners in Covid-19 Pandemic: An Indian Perspective *Int. J. Res. Pharm. Sci.* 2020; 11(1):1226-1229.
4. Tripathi R, Alqahtani SS, Albarraq AA, Meraya AM, Tripathi P, Banji D, *et al*. Awareness and Preparedness of Covid-19 Outbreak Among Healthcare Workers and Other Residents of South-West Saudi Arabia: A Cross-Sectional Survey. *Frontiers in Public Health*. 2020; 18(8):482.
5. World Health Organization. Controlling the spread of Covid-19 at ground crossings: interim guidance, 2020. World Health Organization. <https://apps.who.int/iris/handle/10665/332165>. Ministry of Health and Family welfare, India: Covid-19 Emergency Response Project Environmental and Social Management Framework, 2020.