A Cross Sectional Evaluation of Knowledge and Awareness towards Novel Coronavirus (COVID-19) Among Dental Students of Kanpur City, India.

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Abstract

Background: Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. COVID-19 is a new disease and there is limited information regarding risk factors for severe disease. In addition to the incidence of asymptomatic and subclinical COVID-19 cases in population, the transmission of infections between dentist and patients and the dental team may present a huge threat to dental practice. The present study aims to evaluate the knowledge and awareness towards 2019 novel coronavirus amongst dental students of Kanpur city, Uttar Pradesh.

Materials and Methods: A cross-sectional survey was conducted which comprised of 390 undergraduate and post-graduate students. A modified pretested, self-administered, close-ended questionnaire was administered through emails. Data was analyzed using IBM SPSS Statistics-version 21. Categorical data were compared using the Chi-square test. All values were considered statistically significant for a value of $p \leq 0.05$.

Results: The results of the study revealed that there only 14.10% respondents had knowledge regarding the source of covid-19 by direct transmission and infected person. Majority of the participants 256 (65.64%) were not aware

about the preventive treatment available for the novel coronavirus COVID-19. Differences between the responses in all the groups was statistically significant (p<0.001).

Conclusion: The present study concludes that there are knowledge and awareness gaps amongst dental students. It is highly desirable for relevant dental professional organizations to emphasize occupational and educational campaigns to increase the knowledge and awareness among dental students towards novel coronavirus (2019-nCoV).

Keywords: Awareness, Dental Students, Knowledge, Novel Coronavirus (2019-nCoV), Viral Infection

Introduction

Coronavirus outbreak 2019, also known as COVID-19, has quickly become an epidemic worldwide. The pathogen responsible for such infection is coronavirus 2 (SARS-CoV-2), a severe acute respiratory syndrome. Although the new COVID-19 virus differs from SARS-CoV, it uses the same host receptor, namely the human angiotensin-converting enzyme 2 (ACE2). On 30 January 2020, the World Health Organization (WHO) announced the widespread spread of SARS-CoV-2 and its related disease (COVID-19) an emergency in public health with an overall mortality rate currently estimated to be as high as 3.4 percent.[1,2] Coronaviruses are enveloped non-segmented positive-sense RNA viruses belonging to the family Coronaviridae and the order Nidovirales and broadly distributed in humans and other mammals.[3]

Nowadays, two novel viruses cause severe acute disease, namely, Middle East Respiratory Syndrome-Corona-Virus (MERSCoV) and Severe Acute Respiratory Syndrome-Corona-Virus (SARS-CoV). (Challenges)These two viruses are causing acute and often fatal illness. Due to their high fatality rate (30–90%), they have had dual effect: fear among public from contracting one or more of them as well as high burden on the healthcare system, including the treating physician and other health care workers. The reservoir of the viruses is usually animal, including: bats, camels, or chimpanzees.[4,5]

More than 10,000 cases have been accumulated in the past 20 years, with death rates of 10% for SARS-CoV and 37% for MERSCoV.[6,7] In December, 2019, a series of pneumonia cases of unknown cause emerged in Wuhan, Hubei, China, with clinical presentations greatly resembling viral pneumonia. Deep sequencing analysis from lower respiratory tract samples indicated a novel coronavirus, which was named 2019 novel coronavirus (2019-nCoV). Thus far, more than 800 confirmed cases, including in health-care workers, have been identified in Wuhan, and several exported cases have been confirmed in other provinces in China, and in Thailand, Japan, South Korea, and the USA.[8-11]

On 12 February 2020, the novel coronavirus was named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) while the disease associated with it is now referred to as COVID-19. It is a new strain of coronavirus that has not been previously identified in humans.

The new name of this disease is coronavirus disease 2019, abbreviated as COVID-19. In COVID-19, 'CO' stands for 'corona,' 'VI' for 'virus,' and 'D' for disease. Formerly, this disease was referred to as "2019 novel coronavirus" or "2019-nCoV".[12]

Because of the specific characteristics of dental procedures where a large number of droplets and aerosols may be produced, standard protective measures are not sufficiently effective in daily clinical work to prevent the spread of COVID-19, particularly when patients are in the incubation period, are unaware of being infected or choose to conceal their infection. A systematic review of recent cross-sectional studies regarding the levels of knowledge and awareness of COVID-19 among dentists in India

revealed inadequacy and considerable variation in the dental practice. COVID-19 is a new disease and there is limited information regarding risk factors for severe disease. In addition to the incidence of asymptomatic and subclinical COVID-19 cases in population, the transmission of infections between dentist and patients and the dental team may present a huge threat to dental practice.

Nevertheless, to our knowledge no such study has been conducted in Kanpur City that assess the knowledge regarding Covid-19. Thus, the present study was conducted with the aim to assess the knowledge and awareness of COVID-19 among dental students in Kanpur city, in India.

Material and Methods

The present descriptive, cross-sectional study was conducted which comprised of 390 undergraduate and post-graduate students. The study was conducted during a period of one month (April to May). The study protocol was approved by the Institutional Review Board via online mode (Ethical Clearance No: 02/IEC/RDCHRC/2020-21/011) and ethical approval was granted for the same. A digitally signed informed consent form was obtained from all the participants. A modified pretested, self-administered, close-ended questionnaire consisting of 10 questions each (adapted from Centre for Disease Control & Prevention {CDC} and World Health Organization {WHO}) were included to evaluate the knowledge and awareness regarding the novel corona virus amongst the dental students.[13,14] Students were contacted through emails due to the lockdown protocols in the country and those who agreed to participate in the study were included in the study. Students who did not completely filled the questionnaire or who did not responded after three repeated attempts were excluded from the study.

Pilot study was conducted among 40 students to determine the feasibility of the study. These students were excluded from the final sample. Cronbach's coefficient was found to be 0.77 which signifies an acceptable internal reliability of the questionnaire. For testing the validity, the content validity ratio was also calculated by using item-rated content validity indices. This was achieved by taking the responses on the dichotomous scales where the academician indicated whether an item is favorable (score of + 1) or unfavorable (score of 0). The content validity ratio was found to be as 0.88 by the panel of four academicians. In addition, there were no changes required in the questionnaire as a result of pretest.

The estimated sample size was 384 which were rounded off to a sample of 400 to accommodate dropouts. There were 10 dropouts as the participants were absent on the days of study. Therefore, the final sample size was 390 (65 students in each group). The study participants were recruited by convenience sampling method. The response rate was 95%. The students were told to approach the investigator immediately via email in case of any doubts regarding any of the questions in the questionnaire. Data were analysed using IBM SPSS Statistics-version 21 (IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.) Descriptive statistics included calculation of percentages, mean, and standard deviation. Data distribution was assessed for normality using the Shapiro-Wilk test. Categorical data were compared using the Chi-square test. All values were considered statistically significant for a value of $p \leq 0.05$.

Results

A total number of three hundred ninety participants including both undergraduate as well as post graduate students were enrolled in the study. Table 1 shows the gender distribution of the study participants, out of 390

subjects 140 (35.90%) were males and 250 (64.10%) were females. Table 2 shows the year wise distribution of study participants in all groups, out of 390 subjects 66 (16.92%) subjects were from first year, 81 (20.77%) subjects were from second year, 78(20%) subjects were from third year, 51(13.08%) subjects were from final year, 43 (11.02%) subjects were interns and 71 (18.20%) subjects were post graduate students. Table 3 shows the response of the participant's knowledge regarding the novel Coronavirus (COVID-19). All participants (100%) knew that COVID-19 is a viral infection. Regarding their knowledge of source of infection of COVID-19 216 (55.38%) respondents reported direct transmission, 119 (30.51) reported infected person and 55 (14.10%) reported that direct transmission and infected person both are the source of infection of COVID-19. Difference between the responses in all the groups was statistically significant (p<0.001). Regarding the question assessing the knowledge about symptoms of COVID-19 percentage of correct answer was lowest (8.97%). Difference between the responses in all the groups was statistically significant (p<0.001). Majority of the participants 305 (78.21%) were agreed with that the COVID-19 is fatal disease to any person. Only 78 (20.0%) respondents knew that the period of incubation for COVID-19 is about 1–14 days. Difference between the responses in all the groups was statistically significant (p<0.001). Majority of the participants 237(60.67%) were agreed with that the patients with COVID-19 should be isolated in a private room/ward. Difference between the responses in all the groups was statistically significant (p<0.001). Regarding question assessing knowledge of meaning of term 'Quarantine' only 164 (42.05%) respondents knew the proper meaning of term 'Quarantine'

115(29.49%) participants reported that evaluation of the patient, 197(50.51%) reported that personal protective measures and 78(20.0%) participants reported that hand hygiene can control COVID-19 infection in a Dental setting. This suggests that the dental health students are not well knowledgeable of the COVID-19 infection control in a Dental setting. Difference between the responses in all the groups was statistically significant (p<0.001). Regarding the question assessing the knowledge about the population at a higher risk of developing COVID-19, 88 (22.56%) respondents knew that children, 184(47.18%) respondents knew that adults and 118 (30.26%) respondents knew that Geriatric population/ person with heart disease or diabetes at a higher risk of developing COVID-19. Difference between the responses in all the groups was statistically significant (p<0.001). Regarding the question assessing the knowledge about distance must be maintained from a person who is sneezing and coughing, only 119 (30.51%) respondents knew the correct answer. Difference between the responses in all the groups was statistically significant (p<0.001).

Table 4 shows the responses of the participants awareness regarding the novel Coronavirus (COVID-19).180 (46.15%) participants reported that patients with COVID-19 should wear a mask, however 156 (40%) participants reported that patients with COVID-19 should not wear a mask. Difference between the responses in all the groups was statistically significant (p<0.001). Majority of the participants 188(48.20%) had no idea regarding the patients without COVID-19 should wear a mask.

Result of the study revealed that for awareness, the percentage of correct answers was lowest (14.10%) for the question patients without COVID-19 should wear a mask. Additionally, frequency of correct response for awareness regarding respirator was lowest (24.62%).

For awareness towards N95 filtering facepiece respirator (FFR), only 41(10.51%) participants were aware about

N95 filtering facepiece respirator (FFR). Difference between the responses in all the groups was statistically significant (p<0.001).

Regarding use of nonsterile, disposable patient isolation gowns for patients with COVID-19 very less participants (9.74 %) provide the correct response. Difference between the responses in all the groups was statistically significant (p<0.001).

Awareness towards effectiveness of antibiotics in prevention or treatment of COVID-19 only 120 (30.77%) participants knew that antibiotics do not work against COVID-19. Difference between the responses in all the groups was statistically significant (p<0.001).

Majority of the participants 256 (65.64%) were not aware about the preventive treatment available for the novel coronavirus COVID-19. Difference between the responses in all the groups was statistically significant (p<0.001).

Regarding the availability of vaccine for the novel coronavirus (COVID-19), all participants reported that there is no vaccine is available for the prevention of novel coronavirus (COVID-19). 181(46.41%) participants reported that novel coronavirus (COVID-19) is not a curable disease. Difference between the responses in all the groups was statistically significant (p<0.001).

Highest responses were observed for the role of media in the awareness of disease. 346 (88.72%) participants reported that media updates are creating awareness about novel coronavirus (COVID-19). This suggests that if media can help educate people, COVID-19 will be better understood and less scary.

Discussion

To the best of our understanding, there was no previous report of similar study, particularly none that examined knowledge and awareness regarding the novel coronavirus (COVID-19) among dental students in Kanpur city. Efficient prevention and control of infections relies on

healthcare worker's knowledge and awareness at all levels. In present study most of the participants were females. Althobaity, et al conducted a study to evaluate the knowledge and awareness toward Middle East respiratory syndrome coronavirus (MERS-CoV) of pilgrims from Saudi Arabia and from different Arabian countries he found that Saudi pilgrims possess good knowledge about the MERS-CoV although more orientation is still required.[15] The results of the study revealed that the respondents in this study had low level of the overall knowledge regarding the novel Coronavirus including: source of infection, symptoms of infection, incubation period of COVID-19, meaning of term 'Quarantine', infection control in a Dental setting and distance to be maintained from a person who is sneezing and coughing. The majority of participants (60.67%) agreed with that patients with COVID-19 should be isolated in a private room/ward. Previous studies have reported that the key preventative and control steps for the management of acute respiratory viral infection are clear and well established.[16]

Almutairi KM et al conducted a study to evaluate the awareness, attitudes, and practices related to MERS-CoV among the public in Saudi Arabia and it was found that the knowledge of MERSCoV in public is not optimal. Periodic educational interventions using locally adjusted methods could contribute to preventing panic, encouraging people to access health care early, and reducing infection and mortality.[17]

Nour et al conducted a study to evaluate the knowledge, attitude and practices of healthcare providers towards MERS-CoV infection at Makkah hospitals, KSA and it was found that there was knowledge gap and negative attitude among healthcare providers at Makkah hospitals towards MERS-CoV infection.[18] The results of the present study showed that the respondents in this study

had low overall awareness of the novel Coronavirus including: respirator, N95 filtering facepiece respirator (FFR), use of nonsterile, disposable patient isolation gowns used for patients with COVID-19, availability of preventive treatment for COVID-19, curability of COVID-19, role of media in awareness of COVID-19.

Nour et al. reported that health care providers use personal protective equipment and keep healthy lifestyle to prevent MERS-CoV infection.[18] Similarly, Thu et al. reported limited numbers of correct responses regarding items about hand washing and the use of personal protective equipment.[19] Results of the present study showed 40% participants reported that patients with COVID-19 should not use personal protective measures while 13.85% were not aware of this. 14.10% participants reported that patients without COVID-19 should use personal protective measures.

As on February 4th 2020, China has confirmed 20471 cases with 425 deaths and 2788 severe cases of 2019-nCoV. In addition to China, 24 different countries from Europe, Northern America, Southeast Asia, Eastern Mediterranean, and Western Pacific Asia have reported the confirmed cases of this disease making the total tally of confirmed cases to 20630 worldwide. In the present scenario of not having any direct acting anti-viral agent and vaccines, strict implementation of high vigilance for 2019-nCoV and appropriate prevention and control measures are of utmost importance to check the further spread and control of this virus. The risk of cross-infection between patients and dental practitioners may be high due to the characteristics of the dental settings.[20,21] In the present study low percentage of correct responses were observed regarding knowledge and awareness suggesting that there is lack of information towards novel Coronavirus (COVID-19) among dental students.

Nevertheless, there is a pressing necessity to improve knowledge of dental health care professionals toward novel Coronavirus (COVID-19). Learning materials posted on the Ministry of Health's website during the novel Coronavirus (COVID-19) outbreak may be one of the key sources of information among health professionals. In addition, individualized text messages sent to dental health professionals by the respective professional agencies may be the source of this information. However, seminar, symposium and research papers may be the source of information on knowledge and awareness among dental health professionals during the Coronavirus (COVID-19) outbreak.

Conclusion

In a short span of time the new novel coronavirus (2019-nCoV) has become a global concern. Following numerous recommendations and guidance from national and international dental societies and studies by government agencies, insufficient control of infections in dental care facilities has been demonstrated. The present study showed that there are knowledge and awareness gaps amongst dental students. It is highly recommended for relevant dental professional organizations to emphasize occupational and educational campaigns to increase the knowledge and awareness among dental students towards novel coronavirus (2019-nCoV).

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Legend Tables

Table 1: shows the gender distribution of the study participants

S.N.	Groups	Total (n=390)	Gender		Chi square value[I]	p-value
			Males n(%)	Females n(%)		
1.	Group 1	65	25(38.5)	40(61.5)		
2.	Group 2	65	19(29.2)	46(70.8)		
3.	Group 3	65	27(41.5)	38(58.5)	7.176	0.208
4.	Group 4	65	17(26.2)	48(73.8)		
5.	Group 5	65	23(35.6)	42(64.6)		
6.	Group 6	65	29(44.6)	36(55.4)		

I- Chi Square test*S-Statistically significant, p≤0.05

Table 2 shows the year of study of the study participants

S.No	Year of study	Grp 1 n(%)	Grp 2 n(%)	Grp 3 n(%)	Grp 4 n(%)	Grp 5 n(%)	Grp 6 n(%)	Total (n=390)	Chi square value[I]	p-value
1.	First year	13(20)	11(16.9)	4(6.2)	12(18.5)	13(20)	13(20)	66		
2.	Second year	15(23.1)	12(18.5)	9(13.8)	17(26.2)	14(21.5)	14(21.5)	81		
3.	Third year	11(16.9)	17(26.2)	11(16.9)	15(23.1)	12(18.5)	12(18.5)	78		
4.	Fourth year	10(15.4)	11(16.9)	13(20)	11(16.9)	3(4.6)	3(4.6)	51	42.480	<0.001*
5.	Interns	9(13.8)	5(7.7)	12(18.5)	5(7.7)	6(9.2)	6(9.2)	43		
6.	Postgraduate	7(10.8)	9(13.8)	16(24.5)	5(7.7)	17(26.2)	17(26.2)	71		
	Total (n=390)	65	65	65	65	65	65			

I- Chi Square test*S-Statistically significant, p≤0.05

Table 3 Distribution of responses of the participants knowledge regarding the novel Coronavirus

Knowledge Related Questions	Responses	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Chi square value[I]	p-value
Q1. What is COVID-19?	1. Bacterial infection 2. Viral infection 3. Don't know	0(0) 65 (100) 0(0)	0(0) 65 (100) 0(0)	0(0) 65 (100) 0(0)	0(0) 65 (100) 0(0)	0(0) 65 (100) 0(0)	0(0) 65 (100) 0(0)	-[a]	-[a]
Q2. What is the source of infection of COVID-19?	1. Direct Transmission (Coughing, Sneezing) 2. Infected Person 3. Both 1 & 2 4. Neither 1 nor 2	17 (7.9) 37(31.1) 11 (20) 0(0)	32(14.8) 17 (14.3) 16 (29.1) 0(0)	44(20.4) 12(10.1) 9 (16.4) 0(0)	21 (9.7) 30(25.2) 14(25.5) 0(0)	47 (21.8) 16 (13.4) 2 (3.6) 0(0)	55(25.5) 7 (5.9) 3 (5.5) 0(0)	82.266	<0.001*
Q3. What are the symptoms of COVID-19?	1. Fatigue or myalgia 2. Fever 3. Cough 4. Headache/Diarrhoea 5. All of the Above	10(41.6) 19(17.1) 31(14.8) 0(0) 5 (14.3)	6 (25) 10 (9.0) 35 (16.7) 5 (50) 9 (25.7)	4 (16.7) 21(18.9) 39(18.6) 0(0) 1 (2.9)	0(0) 19(17.1) 37(17.6) 0(0) 9 (25.7)	0(0) 22 (19.9) 35 (16.7) 1 (10.0) 7 (20)	4 (16.7) 20(18.0) 33(15.6) 4 (40.0) 4 (11.4)	47.768	<0.001*
Q4. COVID-19 is a fatal disease to any person?	1. Yes 2. No 3. Don't know	59 19.3) 0(0) 6 (11.5)	50 (16.4) 5 (15.2) 10 (19.2)	55(18.0) 3 (9.1) 7 (13.5)	48(15.7) 9 (27.3) 8 (15.4)	45 (14.8) 7 (21.2) 13 (25)	48(15.7) 9 (27.3) 8 (15.4)	17.813	0.058

Question	Options							χ²	p-value
Q5. What is the incubation period of COVID-19?	1. 1-5 days 2. 1-7 days 3. 1-14 days	12(10.4) 35(17.8) 18(23.1)	19 (16.5) 33 (16.8) 13 (16.7)	23(20.0) 31(15.7) 11(14.1)	19(16.5) 36(18.3) 10(12.8)	19 (16.5) 29 (14.7) 17 (21.8)	23(20.0) 33(16.8) 9 (11.5)	10.602	<0.001*
Q6. Patients with COVID-19 should be isolated in a private room/ward?	1.Yes 2.No 3.Don't know	39(16.5) 4 (9.1) 22(20.2)	42 (17.7) 6 (13.6) 17 (15.6)	36(15.2) 10(22.7) 19(17.4)	47(19.8) 3 (6.8) 15(13.8)	37 (15.6) 9 (20.5) 19 (17.4)	36(15.2) 12(27.3) 17(15.6)	12.591	0.247
Q7. Do you know the meaning of term 'Quarantine'?	1. Yes 2. No	36 (22) 29(12.8)	24 (14.6) 41 (18.1)	29(17.7) 36(15.9)	23(14.0) 42(18.6)	25 (15.2) 40 (17.7)	27(16.5) 38(16.8)	7.155	0.002*
Q8. How can this infection be controlled in a Dental setting?	1. Evaluation of the patient 2.Personal Protective measures 3. Hand Hygiene 4. All of the above	12(10.4) 35(17.8) 18(23.1) 0(0)	19 (16.5) 33 (16.8) 13 (16.7) 0(0)	23 (20) 31(15.7) 11(14.1) 0(0)	19(16.5) 36(18.3) 10(12.8) 0(0)	19 (16.5) 29 (14.7) 17 (21.8) 0(0)	23 (20) 33(16.8) 9 (!1.5) 0(0)	10.602	<0.001*
Q9. Which population is at a higher risk of developing COVID-19?	1. Children 2. Adults 3. Geriatric population/ person with heart disease or diabetes	17(19.3) 39(21.2) 9 (7.6)	12 (13.6) 34 (18.5) 19 (16.1)	13(14.8) 31(16.8) 21(17.8)	27(30.7) 15 (8.2) 23(19.5)	2 (2.3) 38 (20.7) 25 (21.2)	17(19.3) 27(14.7) 21(17.8)	43.553	<0.001*

Q10. What distance must be maintained from a person who is sneezing and coughing?	1. 3 meters 2. 1 metre 3. Don't know	17 (8.3) 27(22.7) 21(32.3)	56 (27.2) 0(0) 9 (13.8)	30 14.6) 22(18.5) 13(20.0)	3 (15.5) 19(16.0) 14(21.5)	37 (18.0) 24 (20.2) 4 (6.2)	34(16.5) 27(22.7) 4 (6.2)	69.330	<0.001*

I- Chi Square test, *S-Statistically significant, p≤0.05, -ᵃ: No statistics were computed as the values are constant.

Table 4 Distribution of responses of the participants awareness regarding the novel Coronavirus

Awareness Related Questions	Responses	Frequency (%)						Chi square value[I]	p-value
		Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6		
Q1. Patients with COVID-19 should wear a mask?	1. Yes 2. No 3. Don't Know	26(14.4) 37(23.7) 2 (3.7)	27 (15) 22(14.1) 16(29.6)	30(16.7) 27(17.3) 8 (14.8)	37(20.6) 26(16.7) 2 (3.7)	31(17.2) 21(13.5) 13(24.1)	29(16.1) 23(14.7) 13(24.1)	29.149	<0.001*
Q2. Patients without COVID-19 should wear a mask?	1. Yes 2. No 3. Don't Know	9 (16.4) 27(18.4) 29(15.4)	8 (14.5) 23(15.6) 34(18.1)	13(23.6) 22(15.0) 30(16.0)	8 (14.5) 24(16.3) 33(17.6)	3 (5.5) 29(19.7) 33(17.6)	14(25.5) 22(15.0) 29(15.4)	11.102	0.350
Q3. What is a respirator?	1. A respirator is a personal protective device that is worn on the face or head and covers at least	10(10.4)	14(14.6)	12 (!2.5)	20(20.8)	20(20.8)	20(20.8)	19.482	0.035

	the nose and mouth.								
	2. A device used for respiration/breathing	51(19.4)	46(17.5)	44(16.7)	36(30.7)	44(16.7)	42(16.0)		
	3. Don't know	4 (12.9)	5 (16.1)	9 (29.0)	9 (29.0)	1 (3.2)	3 (9.7)		
Q4. What is an N95 filtering facepiece respirator (FFR)?	1. A type of respirator which removes particles from the air that are breathed through it. These respirators filter out at least 95% of very small (0.3 micron) particles.	0(0)	8 (19.5)	2 (4.9)	6 (14.6)	8 (19.5)	17(41.5)	67.197	<0.001*
	2.A device used as a facemask.	20(13.9)	15(10.4)	17(11.8)	36 (25)	22(15.3)	34(23.6)		
	3.Don't know	45 (22)	42(20.5)	46(22.4)	23 (!1.2)	35(17.1)	14 (6.8)		
Q5. Are Nonsterile, disposable	1. Yes	3 (7.9)	6 (15.8)	7 (18.4)	0(0)	5 (13.2)	17(44.7)	30.409	<0.001*
	2. No	40(16.9)	40(16.9)	41(17.3)	45 (19)	38 (16)	33(13.9)		
	3. Don't	22(19.1)	19(16.5)	17(14.8)	20(17.4)	22(19.1)	15 (13)		

patient isolation gowns used for patients with COVID-19?	Know								
Q6. Are antibiotics effective in preventing or treating the COVID-19?	1. Yes 2. No 3. Don't Know	13(16.9) 12 (10) 40(20.7)	15(19.5) 16(13.3) 34(17.6)	18(23.4) 9 (7.5) 38(19.7)	19(11.7) 36 (30) 20(10.4)	5 (6.5) 32(26.7) 28(14.5)	17(22.1) 15(12.5) 33(17.1)	49.260	<0.001*
Q7. Is there any preventive treatment available for the novel coronavirus?	1. Yes 2. No 3. Don't Know	0(0) 13(14.4) 52(20.3)	0(0) 18(20.0) 47(18.4)	6 (13.6) 18(20.0) 41(16.0)	5 (11.4) 15(16.7) 45(17.6)	15(34.1) 16(17.8) 34(13.3)	18(40.9) 10(11.1) 37(14.5)	47.569	<0.001*
Q8. Is there any vaccine available for the prevention of novel coronavirus?	1. Yes 2. No	0(0) 65 (100)	0(0) 65 (100)	0(0) 65 (100)	0(0) 65 (100)	0(0) 65 (100)	0(0) 65 (100)	-[a]	-[a]
Q9. Is novel coronavirus curable?	1. Yes 2. No 3. Don't Know	21(16.3) 39(21.5) 5 (6.3)	18(14.0) 42(23.2) 5 (6.3)	11 (8.5) 33(18.2) 21(26.3)	18(14.0) 37(20.4) 10(12.5)	23(17.8) 30(16.6) 12(15.0)	38(29.5) 0 (0) 27(33.8)	88.056	<0.001*
Q10. Do you feel media updates are creating panic rather than awareness?	1. Yes 2. No	10(22.7) 55(15.9)	6 (13.6) 59(17.1)	10(22.7) 55(15.9)	4 (9.1) 61(17.6)	13(29.5) 52(15.0)	1 (2.3) 64(18.5)	15.268	0.009

I- Chi Square test, *S-Statistically significant, p≤0.05, -[a]: No statistics were computed as the values are constant.