Awareness on Corona Virus among Students in Duba College

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Abstract:

Background:

Corona virus has been a pandemic problem all over the world. Scientists and researchers are struggling to find treatment/vaccine for corona virus. Because of this pandemic the world is suffering economically. The number of cases of COVID 19 is rising not only in Saudi Arabia but also in other countries. COVID-19 is a disease caused by a new corona virus that emerged in China sometime in December 2019 (Al-Tawfiq, J.F et al. 2020)². The World Health Organization (WHO) declared that most people infected with the COVID-19 virus will experience mild to moderate respiratory illness. Older people and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness²⁰.

Objective: To assess the level of awareness among students in Duba College

Materials and Methods: A five point Likert scale was used to determine the respondents level of agreement to a statement typically: (5) Strongly agree; (4) Agree; (3) Neither agree nor disagree; (2) Disagree; and lastly (1) Strongly disagree. Results showed that the highest point is 5 means strongly agree and the lowest point is 1 means strongly disagree. The data were gathered and consolidated using excel and SPSS 16 for the significance of the study. Of the one hundred thirty (130) respondents, only 54 students participated. Level of Significance: The present study used SPSS for percentage and frequency. One way ANOVA were used using 0.05 level of significance.

Results:

Transmission of corona virus: Of the 54 respondents, thirty eight or 70.3% strongly disagree that corona virus were transmitted thru mosquitoes. Thirty seven or 68.6% respondents strongly agree that corona virus can be transmitted by coughing or sneezing. Twenty eight or 51.8% of responders agree that corona virus can be transmitted by person with no sign and symptoms. Twenty six or 48.2% of strongly disagree that buying goods from China and pets at home can transmit corona virus.

Prevention of corona virus: Thirty eight or 70.4% respondents strongly agree that corona virus can be prevented by washing hands with soap and water and thirty six or 66.7% agree that the idea of wearing mask in public prevents corona virus. Thirty five or 64.9% respondents agree that corona virus can be prevented by social distancing. In addition, nineteen or 35.2% strongly disagree that corona virus can be prevented by using hair dryer while eighteen or 33.3% disagree that corona virus can be prevented using hand sanitizer.

Tests to detect corona virus: Twenty nine or 53.7% respondents strongly agree that serological test were to be use for corona virus. Twenty two or 40.7% respondents strongly agree that molecular test were to be use to test corona virus. Twenty or 37.1 responders strongly disagree that blood donation were not a test to detect corona virus while fifteen or 27.8 respondents disagree that thermal scanner cannot be utilized as a test for corona virus.

Treatment of corona virus: Thirty or 55.6% respondents strongly agree that there were no specific vaccine for corona virus. Twenty eight or 51.9% respondents strongly disagree that natural medicine like garlic can treat corona virus while twenty seven or 50% of respondents agree that there were no specific treatment for corona virus. Twenty five or 46.3% strongly disagree that pneumonia vaccine can treat corona virus and twenty or 37.1% disagree that antibiotic can treat corona virus.

Conclusion: The level of awareness among students pertaining to transmission and prevention, test and treatment of corona virus has adequate level of awareness. Public awareness, education and information dissemination about transmission, and prevention corona virus among people in the community

Key Word: Corona virus, awareness, transmission, prevention, test, treatment

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I. Introduction

Two hundred thirteen countries and territories around the world have reported a total of 9,438,333 confirmed cases of the coronavirus COVID-19 that originated from Wuhan, China, and a death toll of 482,021 deaths (Worldometer updates 2020)²⁰. The United States has passed Italy to become the country with the most corona virus deaths. However, as a proportion of the total population in the U.S., virus deaths remain at about one-sixth of those in hard-hit Italy or Spain (WHO 2020)¹⁸. The corona virus disease 2019 (COVID-19) has become the first pandemic of the 21st century, engaging the health care providers in almost all countries around the world (Hajifathalian K et al).⁷. UNICEF (2020) announced that the protection of children and educational facilities is particularly important. Precautions are necessary to prevent the potential spread of COVID-19 in school settings¹⁶. Awareness of an individual's knowledge and being able to predict his or her behavior is crucial when evaluating clinical preparedness for pandemics with a highly pathogenic virus (Almutairi KM 2015)¹

II. Materials and Methods

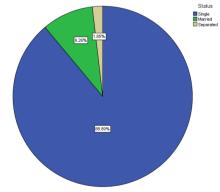
The present cross-sectional study was conducted from April to May 2020 among students in Duba College. The college is exclusively for female students only. A close ended survey questionnaire was prepared with 19 questions about transmission, prevention, tests and treatment about corona virus. A total of estimated 130 respondents, only 54 students answered the survey questionnaire. The consent for the student was obtained from the supervisor after explaining the purpose of the study. The survey questionnaires were sent to the selected respondents thru email and texts only because all schools observed the quarantine period in Saudi Arabia due to corona virus pandemic. In the survey questionnaire, the respondents will open the link and answered the questions from the choices of 1-5. The 1-5 Likert (Bhat, A., 2020) type scale response level of agreement consists of the following: (5) Strongly agree; (4) Agree; (3) Neither agree nor disagree; (2) Disagree; and lastly (1) Strongly disagree³. The data was gathered in Excel and SPSS 16 to determine the level of significance.

Statistical analysis

The data was analyzed using SPSS version 16. One way ANOVA was used to determine the degrees of freedom and variance. The critical values of 6.39 and 0.05 level of significance were used in the present study. The highest F-value among the transmission of corona virus shows 8.451(transmitted by person with no sign and symptoms) while 8.660 F value (washing hands with soap and water) for prevention of corona virus. The F value of 5.284 (molecular diagnosis) and 2. 468 F value (pneumonia vaccine can treat corona virus). To analyze the value, if one or two values are more than the critical value of 6.39 therefore there is a significant difference between the level of awareness among selected respondents when grouped according to their status.

III. Result

In the present study majority of the respondents 48 (88.89%) are single, 5(9.3%) were married, while 1 (1.85%) were separated (Pie graph no1).



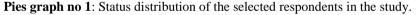


Table no1: Shows that 37 (68.6) of respondents awareness that corona virus transmitted by coughing and sneezing while transmission of corona virus by person with no sign and symptoms 28 (51.8). Awareness about corona virus did not transmit by mosquito 38 (70.3) and corona virus transmit by buying goods in China 26 (48.2) while corona virus transmitted from pets at home 26 (48.1).

Methods of transmission of corona virus	No. (%) of correct response		Total (n=54) No. (%)	ANOVA F Sig.	
Transmit by cough and sneeze	Strongly agree 32 (59,3)	Agree 5 (9.3)	37 (68.6)	.982	.381
Transmitted by person with no sign and symptoms	Strongly agree 18 (33.3)	Agree 10 (18.5)	28 (51.8)	8.451	.001
Transmit by mosquito	Strongly disagree 24 (44.4)	Disagree 14 (25.9)	38 (70.3)	3.028	.057
Transmit buying goods from China	Strongly disagree 13 (24.1)	Disagree 13 (24.1)	26 (48.2)	.807	.452
Transmit by pet at home	Strongly disagree 16 (29.6)	Disagree 10 (18.5)	26 (48.1)	.185	.831

Table no1: shows distribution of study according to awareness regarding to transmission of corona virus.

Table no 2: Awareness regarding prevention of corona virus, in the present study shows that 38 (70.4) of participants believe that washing of hands with soap and water is the best means of prevention of corona virus followed by wearing mask in public 36 (66.7) and social distancing 35 (64.9). Using hand dryer 19 (35.2) and hand sanitizer 18 (33.3) is the least prevention against corona virus.

 Table no 2: shows distribution of study according to awareness of respondents regarding prevention of corona virus

virus.					
Methods of prevention of corona virus	No. (%) of correct response		Total (n=54) No. (%)	ANOVA F Sig.	
Social distancing	Strongly agree 30 (55.6)	Agree 5 (9.3)	35 (64.9)	4.531	.015
Wearing mask in public	Strongly agree 31 (57.4)	Agree 5 (9.3)	36 (66.7)	.929	.402
Washing hands with soap and water	Strongly agree 30 (55.6)	Agree 8 (14.8)	38 (70.4)	8.660	.001
Using hand dryer	Strongly disagree 8 (14.8)	Disagree 11 (20.4)	19 (35.2)	.179	.836
Using hand sanitizer	Strongly disagree 6 (11.1)	Disagree 12 (22.2)	18 (33.3)	3.222	.048

Table no3: Reveals that the awareness of corona virus regarding the test to detect corona virus was serological test 29 (53.7) followed by molecular test 22 (40.7). Blood donation did not test blood for corona virus 20 (37.1) and thermal scanner with 15 (27.8).

Table no 3: shows distribution	of study according t	o awareness regarding the tests	to detect corona virus

	No. (%) of correct response		Total	ANG	OVA
Methods of tests for corona virus			(n=54) No. (%)	F	Sig.
Molecular diagnosis	Strongly agree 16 (29.6)	Agree 6 (11.1)	22 (40.7)	5.284	.008
Serological test	Strongly agree 17 (31.5)	Agree 12 (22.2)	29 (53.7)	1.946	.153
Thermal Scanner	Strongly disagree 3 (5.6)	Disagree 12 (22.2)	15 (27.8)	1.167	.320
Blood Donation	Strongly disagree 13 (24.1)	Disagree 7 (13.0)	20 (37.1)	.190	.828

Table no 4: In the study about the awareness of respondents in the treatment of corona virus, 30 (55.6) expressed that there is no specific vaccine for corona virus. 28 (51.9) say that garlic cannot treat corona virus while 27 (50.0) say there is no specific treatment for it. Pneumonia vaccine cannot treat corona vaccine 25 (46.3) and 20 (37.1) expressed that antibiotic cannot treat corona virus.

			Total (n=54)	ANOVA	
Methods of prevention of corona virus	No. (%)	No. (%)	No. (%)	F	Sig.
Is there a specific treatment for corona	Strongly	Disagree			
virus?	disagree		27 (50.0)	2.102	.133
	16 (29.6)	11 (20.4)			
Is there a specific vaccine for corona	Strongly	Disagree			
virus?	disagree		30 (55.6)	1.402	.255
	21 (38.9)	9 (16.7)		1.402	.235
Antibiotic can treat corona virus	Strongly	Disagree			
	disagree 17		20 (37.1)	1.065	.352
	(31.5)	3 (5.6)		1.005	.332
Pneumonia vaccine can treat corona	Strongly	Disagree			
vaccine	disagree		25 (46.3)	2.468	.095
	15 (27.8)	10 (18.5)		2.408	.095
Garlic can treat corona virus	Strongly	Disagree			
	disagree		28 (51.9)	.896	.415
	15 (27.8)	13 (24.1)			

Table 4: shows distribution of study according to awareness regarding the treatment for corona virus

IV. Discussion

As far as the profile of the study is concerned in terms of status, majority of the students were single 48 (88.89%) while 5(9.3%) were married, and 1 (1.85%) were separated.

Thirty seven or 37 (68.6%) students were aware that corona virus is transmitted through coughing and sneezing. Moreover, there was a similarity stated by Saey, T.H. (2020) emphasized that corona virus spreads just by talking and breathing advertise in Science News. Independent Journalism. 2020^{13} . In addition, corona virus was transmitted by asymptomatic person the same idea stated by Singhal, T (2020) ¹² in his article entitled "A Review of Corona Virus Disease-2019".

Thirty five or 64.9% showed awareness on social distancing which was similar on the advice of World Health Organization (WHO 2020) to maintain at least 1 meter distance from one another in public place¹⁸.

Twenty nine or (53.7%) of students was aware of serological test to be use to detect corona virus. There was a similarity in the article of Hahn, S.M. (2020) to authorize the use of serological test for clinical laboratories.⁵.

Majority of the students responded were thirty or 55.6% were aware that there is no specific vaccine for corona virus at this time. The same thing mentioned by Radcliffe, S (2020) that scientist around the world are working for a possible treatment and vaccine for corona virus.¹². There is also a similarity about twenty or 37.1% awareness of students that antibiotic cannot treat antibiotic. There is a similarity in the article mention by Levine, D (2020) in U.S. News Health, that antibiotic can treat only bacterial infections⁹ while Coppola R(2020)⁴ reason out that giving antibiotic to patient with corona virus will make the treatment harmful.

V. Conclusion

The students who responded in the study about the transmission, prevention, test and treatment of corona virus has adequate level of awareness

Recommendation

Increase awareness campaign should be designed for the transmission and prevention of corona virus. All forms of social media like Twitter, WhatsApp, Facetime, etc should be utilize as a medium of information dissemation for the transmission, prevention, tests and treatment of corona virus. These forms of social media should be a source of information to increase the level of awareness among people in the community.

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Conflict of interest

The authors do not have any conflict of interest to declare.

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