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Students' Knowledge and Attitudes Concerning COVID-19: A Cross-Sectional Study

Wathiq Faraon Hussein
Department of Basic Science, College of Nursing, University of Basrah, Basrah, Iraq

Email: wathiqfarawn@gmail.com

Abstract. Background: The study and daily lives of Chinese undergraduate students have been significantly influenced by the COVID-19 pandemic, which has grown to be a serious public health concern. Objectives: The study aims to assess the level of students' knowledge and attitudes concerning COVID-19. Methods: Through social networking sites and WhatsApp groups, the researcher created an electronic questionnaire that was disseminated to all Al Karma University students. The students completed it accurately. Students from Al-Karma University served as the study's participants. There were 483 people in the sample overall. The researcher uses an assessment tool to gauge the knowledge and attitudes of Al-Karma University students in Basrah regarding COVID-19. A survey was created to examine university students' COVID-19 information. Once finished, the questions were given out and shown to a group of professionals. An electronic form on the topic of the study, known as the Researcher Study Tool (Questionnaire), will be created to gather the data. There are three sections to the questionnaire. Results: The findings indicated that a greater proportion of the sample was female and that the sample's age ranged from 21 to 25 years. Students were found to have a high degree of understanding and a positive attitude toward COVID-19, with districts and sub-districts having the largest percentage of addresses. Conclusion: The majority of the female sample members were between the ages of 21 and 25, and their addresses were for the districts and sub-districts. Students were said to have a high degree of correct attitude toward COVID-19 and a good level of understanding about the virus.

Highlights:

1. Majority females (21–25 years), from districts/sub-districts in Basrah.
2. COVID-19 knowledge assessed via electronic questionnaire for 483 students.
3. High understanding and positive attitudes toward COVID-19 among students.

Keywords: Students, Knowledge, Attitudes, COVID-19

Introduction

At the end of December 2019, a group of people in Wuhan, China, were reported to have an unidentified pneumonia outbreak [1]. By January 7, it was established that a novel coronavirus called severe acute respiratory syndrome coronavirus 2 (SARSCoV-2) was the cause of the coronavirus illness 2019 (COVID-19) [2]. Human-to-human transmission was shown, and the virus quickly spread throughout China and other

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countries [3]. The World Health Organization (WHO) declared COVID-19 a Public Health Emergency of International Concern on January 30, 2020 [4]. As of July 21, there were 14,562,550 confirmed cases and 607,781 documented deaths globally [5].

During the prolonged Spring Festival national vacation, China swiftly declared the highest-level public emergency response and implemented many extreme measures, including a lockdown in Wuhan, to contain the epidemic. Simultaneously, many additional measures were implemented nationwide, such as strict in-door quarantine, personal health examinations, extensive disinfection, widespread public health education campaigns, and the closing of businesses and schools [6].

Since the start of the COVID-19 epidemic, the public has received a significant amount of new data every day from both official and unofficial sources [7]. Numerous experts and opinion leaders' comments and explanations, occasionally in conflicting ways, flooded the headlines. Misconceptions and false notions were introduced, frequently under the guise of nearly scientific discourse, because it was difficult to discern between accurate and inaccurate information due to the overabundance of information. In addition, people's methods for obtaining knowledge have evolved. To frame how to approach people, information sources are essential. With its readily available and thorough material, the internet has supplanted traditional media as the go-to source of mass information for the younger generation. Internet use, however, is linked to decreased literacy levels [8]. Due to the volume of false information spread without proper technical analysis and evaluation [9,10].

Methods

Between May 3 and June 30, 2021, a descriptive study was conducted to determine the knowledge and attitudes of Basrah City University students on COVID-19. The electronic form was used to collect the sample. Haphazardly in the Basrah.

The researcher used an assessment tool to gauge Basra City University students' attitudes and understanding of COVID-19. A survey was created to examine university students' data regarding COVID-19. Once the questions were finished, they were given out and shown to an expert panel. An electronic form about the study's topic will be created to gather the data. Study Instrument for Researchers (Questionnaire): There are three sections to the questionnaire. Part 1: The sociodemographic characteristics sheet

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is the first section and comprises seven items: age, gender, marital status, stage, study type, college, and residence. Part 2: Inquiries regarding COVID-19 knowledge. Section 3: Inquiries regarding attitudes regarding COVID-19.

Through social networking sites and WhatsApp groups, the researcher created an electronic questionnaire that was disseminated to all Al-Karma University students. The students completed it accurately. Students from Al-Karma University served as the study's participants. The sample size was 680 in total. The statistical tool for social sciences, SPSS version 17, was used to conduct the analysis, and the data is presented as frequency-percentage.

Result and Discussion

Table 1: Students' Demographic Variables

Age	**Frequent**	**Percentage**
18-20	271	39.85%
21-25	375	55.14%
26-30	23	3.38%
31 years and above	11	1.61%
Total	680	100%
Sex	**Frequency**	**Percent**
Male	269	39.55%
Female	411	60.44%
Total	680	100%
Marital status	**Frequency**	**Percent**
Married	80	11.76%
Single	579	85.14%
Divorced	9	1.32%
Widowed	12	1.76%
Total	680	100%
Stage	**Frequency**	**Percent**
First	277	40.73%
Second	131	19.26%
Third	169	24.85%
Fourth	97	14.26%
Fifth	6	0.88%
Total	680	100%
Type of Study	**Frequency**	**Percent**

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Morning	577	84.85%
Evening	103	15.14%
Total	680	100%
Address	**Frequency**	**Percent**
Districts/sub-districts	358	52.64%
City center	322	47.35%
Total	680	100%
College	**Frequency**	**Percent**
Science	200	29.41%
Education	74	10.88%
Pharmacy	135	19.86%
Veterinary Medicine	40	5.88%
Agriculture	45	6.61%
Engineering	30	4.41%
Physical Education and Sports Sciences	156	22.94%
Total	680	100%

According to this table, 269 (39.55%) of the sample were men and 411 (60.44%) were women. The age range of the sample was 21–25 years old. Both the Science college and the districts/sub-districts had the highest percentages of unmarried individuals, with 200 (29.41%) and first-stage 277 (40.73%) having the highest percentages, respectively, and 358 (52.64%) and 579 (85.14%) having the highest percentages. The percentage of study types was higher in Morning 577 (84.85%), while it was higher in Evening 103 (15.14%).

Table 2: Students' Knowledge Regarding COVID-19

No.		**Yes**		**Maybe**		**No**		**MS**
		F	**%**	**F**	**%**	**F**	**%**	
1	Coronavirus COVID-19 is a member of the broad virus family that we were previously aware of.	311	45.73%	256	37.64%	113	16.61%	**2.29**
2	Fever, dry cough, loss of taste and smell, dyspnea, and extreme fatigue are the main signs of the coronavirus.	495	72.79%	142	20.88%	43	6.32%	**2.81**

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3	The coronavirus takes fourteen days to incubate.	536	78.82%	121	17.79%	23	3.38%	**2.75**
4	Coronavirus is a respiratorycoronavirus.	365	53.67%	279	41.04%	36	5.29%	**2.48**
5	Coronavirus infections can result from eating wild animals or coming into close contact with them.	290	42.64%	260	38.23%	130	19.11%	**2.23**
6	An antibiotic is a medication that works well for treating coronavirus.	193	28.38%	331	48.67%	156	22.94%	**2.05**
7	Even those who do not exhibit symptoms of the disease can contract a coronavirus.	490	72.05%	130	19.11%	60	8.82%	**2.63**
8	The sequence of behaviors that the coronavirus risk follows may vary depending on age and gender.	483	71.02%	155	22.79%	42	6.17%	**2.64**
9	When an infected individual coughs or sneezes, tiny droplets are released from their mouth and nose, which is how coronavirus is spread from one person to another.	590	86.76%	78	11.47%	12	1.76%	**2.85**
10	There is no need for infants or children to take precautions against this virus.	109	16.02%	167	24.55%	404	59.41%	**2**

Discussion

Several factors, including the seriousness of the disease, the rate of fatalities, and the degree of transmission, might affect knowledge and attitude regarding a certain infectious disease. Knowledge, attitudes, and practices around COVID-19 have been increasing daily since the WHO declared the virus to be a pandemic.

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To evaluate Basrah University students' knowledge and attitudes regarding COVID-19, we conducted a descriptive cross-sectional study at the Qarmat Ali site using an electronic questionnaire. According to our survey's findings, pupils knew a lot about COVID-19, which is consistent with a study conducted in Jordan [11].

The majority of 872 undergraduate students who participated in a cross-sectional survey were aware of COVID-19, had a positive outlook, and took proactive steps during the outbreak. These findings imply that the widespread public education campaigns, particularly those carried out online, effectively provided health education. Additionally, our findings are consistent with a Chinese study that similarly revealed that students at Mizan University knew a lot about the virus [12].

This finding is in line with numerous other studies on KAP linked to H1N1 among college students in South Korea, the United Kingdom, and Hong Kong [13,14,15].

It has been demonstrated that women are better than men at understanding and preventing infectious diseases (such as H1N1, SARS, MERS, etc.) through practices like mask-wearing and hand hygiene [14,16,17].

When it came to COVID-19-related information, students from public schools and medical programs performed better [18,19,20,21,22].

The distinctive educational circumstances in China may help to explain this. According to state laws, private institutions have been formed as a role-player supplement to the public education system for the past 20 years [23,24,25].

Conclusion

The majority of the female sample members were between the ages of 21 and 25, and their addresses were for the districts and sub-districts. Students were said to have a high degree of correct attitude toward COVID-19 and a good level of understanding about the virus

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