AMJ
ISSN: 0005-2523

ISSN: 0005-2523
Volume 62, Issue 07, September, 2022

NURSING STUDENT'S KNOWLEDGE TOWARD COVID 19 AT-ALHADI UNIVERSITY COLLEGE

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Keywords:
nursing student, coronavirus 19.

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Abstract

Objective(s): To describe demographic characteristics of nursing student at-Alhadi University College ,to assess knowledge toward the COVID-19 infection among student nurses.

Methods: A descriptive design is carried out non purposive "non-probability" sample of (240) nursing students The study carried out in Baghdad City at Al Hadi University College. A questionnaire has been developed for the purpose of the study. Content validity and internal consistency reliability for the study instrument are determined through a pilot study. Data are collected with the study instrument and the interview technique as means of data collection. Data are analyzed through the application of the descriptive and inferential statistical data analysis approaches.

Study Results: The study results reveal that shows that most of the student are within the age group of (26-35) years (44.6%), married (72.1%), with low socioeconomic status (52.5%) and years of study (33.3%). half of them are male and female (50%) finding the majority, (97.6%) knew the mode of transmission of corona virus but only (67.8%) knew the importance of wearing a mask. Similarly, (94.5%) students knew that children and young adults also need to take control measures to prevent the infection by the corona virus and (97.9%) knew that individuals should avoid going to crowded places.

Conclusion: the study concludes that more than three-quarters of the nursing students knew COVID-19 while more than half of the students had a favorable knowledge.

Introduction

Coronavirus disease 2019 (abbreviated "COVID19") is an emerging respiratory disease that is caused by a novel coronavirus and was first detected in December 2019 in Wuhan, China. The disease is highly infectious, and its main clinical symptoms include fever, dry cough, fatigue, myalgia, anddyspnea. In China, 18.5% of the patients with COVID-19 develop to the severe stage, which is characterized by acute respiratory distress syndrome, septic shock, difficult-to-tackle metabolic acidosis, and bleeding and coagulation dysfunction (1).

However, the outbreak of the disease, different governments around the world have been implementing measures to contain and prevent the transmission of COVID-19. The World Health Organization published COVID-19 guidelines and protocols, which were adopted by the ministries of health of different countries (2).

These protocols include information on signs and symptoms and prevention of and protective measures against COVID-19. The Centers for Disease Control and Prevention reiterated that everyone should protect themselves and others to prevent the spread of the disease; such protection includes proper hand hygiene, proper distancing, and use of mask, proper etiquette when coughing and sneezing, and isolation and decontamination of surfaces (3).

The success of the measures implemented is based on the people's adherence to prevention controls, which is largely influenced by knowledge, perception, and preventive behavior against COVID-19(4).

In the US, 47% of the surveyed population are willing to engage in preventive behavior (e.g., hand hygiene by using soap, water, and disinfectants, such as hand sanitizers) .However, adapting these preventive and control behavior requires adequate knowledge (5).

1.2. Importance of the Study

However, to the best of our knowledge, no research on this issue has been conducted among student nurses in Al-hadi University. In crises, such as the current one, student nurses' knowledge should be considered in the planning of effective educational interventions for COVID-19 and in increasing awareness of the health risks brought about by this disease. Therefore, this research aimed to assess the knowledge of nursing students toward the COVID-19.

Methods

A descriptive design(convenience sample) is carried out using the evaluative approach for the period from March 16th, 2022 to April 27th, 2022 to identify nursing student knowledge toward Covid 2019.The study carried out in Baghdad City at Al Hadi University College . The data collection process has been carried out from March 9th2022 until March 29th 2022, each subject takes about (10- 15) minutes during the interview process.

*The Study Instrument :The study instrument is developed to align with the Iraqi culture the questionnaire consists from two parts: Part I: Nursing Students Socio-Demographic Characteristics:This part includes (5) items of nursing student’s demographic characteristics of age, year of study, marital status

Part II: Nursing Students Knowledge toward Covid 19

Comprises an adapted questionnaire from Zhong et al. (13)(6) that measures the COVID-19 knowledge. The questionnaire was developed based on the “guidelines for clinical and community management of COVID-19 by the National Health Commission” of China. The questionnaire had 12 questions covering three aspects: (a) knowledge of the clinical manifestations (four items), (b) knowledge of the mode of transmission (three items), and (c) knowledge of the prevention and control (five items). The items were answered with “know, unknown, or I don't know” response options. Correct answers were scored as 1, whereas incorrect answers or “I don't know” answers

were scored as 0. We added the correct answers to determine the knowledge of the students. High scores indicated superior COVID-19 knowledge .Content validity of the questionnaire is determined through a panel of (13) experts and the internal consistency reliability is determined through a split-half technique and the computation of Cronbach alpha correlation coefficient of (0.75). Data are collected through the use the study instrument and the application of the interview technique as means of data collection after obtaining the participants' agreement to be involved in the study. Data analysis is employed through the application of descriptive and inferential statistical data analysis approaches. All the statistical procedures are tested at $p \leq 0.05$(7_13) .

Results

Table (4-1): Distribution of the sample to Their Socio-Demographic Characteristics (N = 240)

List	Socio demographic Characteristics		Frequency	percent
1	Age group: (Years)	20-25	93	38.7
		26-35	107	44.6
		46-55	40	16.7
		Total	*240*	*100.0*
2	Marital status	Single	56	23.3
		Married	173	72.1
		Divorced or widowed	11	4.6
		Total	*240*	*100.0*
3	Socioeconomic Status	Low	126	52.5
		Moderate	94	39.2
		High	20	8.3
		Total	*240*	*100.0*
4	Years of study	Second stage	80	33.33
		Third stage	80	33.33
		Fourth stage	80	33.33
		Total	*240*	*100.0*
5	Gender	Male	120	50
		Female	120	50

The table (1) shows that most of the student are within the age group of (26-35) years (44.6%), married (72.1%), with low socioeconomic status (52.5%) and years of study (33.3%). half of them are male and female (50%).

Table (2): Knowledge on COVID-19 among nursing students (N = 240)

	Items	Yes (N= %)	No (N= %)	Don't know (N= %)
1	The main clinical symptoms of COVID-19 are fever, fatigue, and dry cough, shortness of breath, diarrhea, and myalgia.	(98.7)	1.3	-
2	Unlike the common cold, stuffy nose, runny nose, and sneezing are less common in persons infected with the COVID-19 virus.	(98.2)	1.8	
3	There currently is no effective cure for COVID-2019, but early symptomatic and supportive treatment can help most patients recover from the infection.	92.4	5.5	2.1
4	Not all persons with COVID-2019 will develop to severe cases. Only those who are elderly, have chronic illnesses, and are obese are more likely to be severe cases.	86.4	10.7	2.9
5	Eating or contacting wild animals would result in the infection by the COVID-19 virus.	20.9	65.2	13.9
6	Persons with COVID-2019 cannot infect the virus to others when a fever is not present.	5.8	88	6.3
7	The COVID-19 virus spreads via respiratory droplets of infected individuals.	97.6	2.1	0.3
8	Ordinary residents can wear general medical masks to prevent the infection by the COVID-19 virus.	67.8	29.3	2.9

9	**It is not necessary for children and young adults to take measures to prevent the infection by the COVID-19 virus.**	**4.5**	**94.5**	**1.0**
10	**To prevent the infection by COVID-19, individuals should avoid going to crowded places such as train stations and avoid taking public transportations.**	**97.9**	**2.1**	**-**
11	**Isolation and treatment of people who are infected with the COVID-19 virus are effective ways to reduce the spread of the virus.**	**95.8**	**2.4**	**1.8**
12	**People who have contact with someone infected with the COVID-19 virus should be immediately isolated in a proper place. In general, the observation period is 14 days.**	**91.9**	**4.2**	**3.9**

Table (2) finding the majority, (97.6%) knew the mode of transmission of coronavirus but only (67.8%) knew the importance of wearing a mask. Similarly, (94.5%) students knew that children and young adults also need to take control measures to prevent the infection by the coronavirus and (97.9%) knew that individuals should avoid going to crowded places. Likewise, (95.8%) students knew effective ways to reduce the spread of the virus that is isolation and treatment of infected people. Similarly, (99%) students answered correctly that people who have contact with someone infected with the coronavirus should be quarantined. Regarding the duration of quarantine for suspected cases, (91.9%) students answered correctly.

Discussions of the Results:

In the current study, among (240) nursing students, were correct for knowledge regarding COVID-19. A similar finding has been reported by a study from Turkey which shows that among 123 nurses, 89.43% of the nurses had extensive knowledge about COVID-197; yet another study shows that 484 (96.85%) nurses of Saudi Arabia had excellent knowledge about COVID-19.8 Likewise, 79.9% of medical students (Nursing, BDS and Allied Health Sciences) of Pakistan had adequate knowledge on coronavirus infection, this could be because of their interest in listening to updates about COVID-19 (14).However, in the study conducted about COVID-19 knowledge and attitude of nursing student in Mumbai, the overall correct percentage (median) regarding the COVID-19 questionnaire among nursing students and faculty (379) was 67.6%.10 In this study, regarding the main symptoms of COVID-

19 (fever, dry cough, fatigue, and myalgia), 98.7% of students answered correctly. A study done in Kist Medical college, Nepal, among nursing students had similar findings showing that (78.4%) of participants knew about the signs and symptoms of COVID-19(15). Similarly, a survey done in India during April 2020 (n=380), found that most (89.74%) of budding nurses responded that fever, fatigue, dry cough, and headache are the main clinical manifestations of COVID-19. Likewise, 114 (91.9%) B.Sc. nursing students of Saudi Arabia knew about the main symptoms of COVID-19 .In this study, the majority (N=250, 92.4%) of students had adequate knowledge that there is currently no effective cure for COVID-19, but early symptomatic and supportive treatment can help most patients recover from the infection (16). Similarly, 330(86.4%) students knew that not all persons with COVID-19 will develop severe cases. These findings are supported by a study published in Saudi Arabia in May 2020, where 3,260(96%) general population knew that there is no effective cure for COVID-19 and 3,227(95.25%) gave correct answer that older adults and those with serious chronic illnesses, such as heart or lung diseases and diabetes, are at increased risk of developing more serious complications from COVID-19 (17). However, only 40.98% of medical and allied health science students in India knew that the elderly persons or people with comorbidities are more prone to acquire COVID-19 (18,19,20) . In this study, (67.8%) students had correct knowledge regarding wearing a general medical mask in the prevention of acquiring coronavirus infection. Likewise, (97.9%) knew that individuals should avoid going to crowded places such as gyms, shopping malls, cinema halls, bus parks and avoid taking public transportations to prevent COVID-19 from the transmission. A study done in India revealed similar results, in which 260(68.42%) budding nurses strongly agreed on wearing general medical masks by people to prevent the spread of coronavirus infection caused by COVID-19,and 365(96.05%) replied that people should avoid going to crowded places such as train stations and avoid taking public transportation to prevent the infection. However, in Pakistan 64.7% of health care workers obtained an overall moderate-to-poor score regarding the correct usage of a surgical face mask to limit the spread of COVID-19(21,22). In this study, knowledge of the correct duration of quarantine for suspected cases was known by (91.9%). A similar finding was found in a study done in Kist Medical College, Nepal, where 517(91.5%) of medical and nursing students answered that WHO recommended self-isolation period for COVID-19 is 14 days. Likewise 773(88.7%) of Nepalese adults knew the need for 2-weeks self-isolation period following the exposure to a COVID-19 suspected person suadi (23). People of Nepal were up to date about regular information and news provided by the Health Ministry of Nepal through different media, so they may have been well-informed about this. But, in India, only 194(47.67%) of nursing students (407) were aware of the correct concept of quarantine and isolation (24,25) .

Conclusion

The findings of this study demonstrated that more than three-quarters of the nursing students knew COVID-19 while more than half of the students had a favorable attitude. The findings revealed some areas that should be focused on by nursing education, as well as MOH and other health agencies, for the purpose of ensuring that the population has adequate knowledge and correct preventive behavior. For example, knowledge of the disease's correct transmission routes should be a focus because this aspect received the lowest knowledge score. Some preventive measures should be emphasized, such as washing of hands after blowing your nose, coughing, or sneezing and the disinfection of surrounding areas, given that they were not frequently observed by the respondents. The findings may also guide the nursing profession with regard to its role in health promotion and disease prevention. Given that the main responsibilities of nurses include promoting health and preventing diseases, the findings may guide the creation of a health education program on COVID-19 for the improvement of the knowledge of the public, encouragement of their adoption of appropriate preventive behavior against the virus, and mitigation of the spread of the infection.

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