Knowledge, Attitude, And Practice Of El Imam El Mahdi University Faculty Of Education At Fourth Class Level Regarding Coronavirus Outbreak, 2021-2022

¹ Mariam Saeed Ibrahim Essa, ² Dafallah Abdelgadir Mokhtar Esmail ³ Hind Abd- Almoula Mohammed Nour Fadlalla ⁴ Hebaa Elfatih Naeem Mohamed Ahmed

¹ Assistant Prof. Faculty Of Public And Environmental Health, El Imam El Mahdi University
 ² Assistant Prof. Faculty Of Public And Environmental Health, El Imam El Mahdi University
 3 Assistant Prof. Medical Laboratories, El Imam El Mahdi University
 4 Public Health Specialist Expanded Program Of Immunization

Abstract

The coronavirus disease (COVID-19) has become a global health concern. The World Health Organization characterized COVID-19 as a March 11, 2020 pandemic. This study assessed the knowledge, attitude, and practice of El Imam El Mahdi University faculty of education at the Fourth Class Level regarding the Coronavirus Outbreak, 2021-2022.

This was a sectional study. The study was conducted in Kosti City among students of El Imam El Mahdi University faculty of education at the Fourth-Class Level. Several 130 students of El Imam El Mahdi University students in the fourth class of the faculty of education were recruited for the study. Data was collected through a questionnaire. Data was analyzed using SPSS version 20.0. The study revealed that the student's overall knowledge regarding coronavirus was found to be suitable among 75%, and 25% was poor. The vast majority of students, 95.8%, had a positive attitude regarding the coronavirus, and only 4.2% had a negative attitude. While the majority of students had poor practice against coronavirus, 83.3%, while only 16.7% had good practice.

In conclusion, high knowledge and positive attitudes regarding coronavirus were reported with poor practice. *Keywords:* Knowledge, Attitude, Practice, Coronavirus, El Imam El Mahdi University.

Date of submission: 20-03-2024

Date of acceptance: 30-03-2024

I.Introduction:

The coronavirus disease (COVID-19) has become a global health concern. The World Health Organization characterized COVID-19 as a pandemic on March 11, 2020 (1). As of November 13, 2020, the number of global confirmed cases and deaths has risen to over 52,657,000 and 1,291,000, respectively. In Japan, more than 113,600 infections and 1,800 deaths were confirmed (2).

Effective antivirals and vaccines are being developed, and effective therapeutic solutions have not been approved (3,4). Therefore, protecting citizens from new infections and healthcare institutions from using up capacities has become extremely important for all countries. Many governments have conducted lockdowns and have interrupted citizens' economic/social activities during rapid infection increases. These countermeasures were remarkable, while their effectiveness depended on the knowledge, attitudes, and preventative practices (KAP) toward COVID-19 among citizens, according to KAP theory and previous experiences (5,6). Meanwhile, countermeasures dramatically changed citizens' lifestyles and daily behaviors, and thus, changes in the mental health, well-being, and psychological impacts related to COVID-19 have also been highlighted and investigated (7,8). For example, a large-scale international survey has been conducted to analyze citizens' mental well-being at the onset of the COVID-19 pandemic (9), and an international large-scale study to evaluate the students' well-being (10, 11).

Previous surveys on KAP and well-being in other countries showed that citizens and university students had high knowledge about COVID-19 and displayed positive attitudes and low-risk practices. Differences in gender, age, education level, and major fields of studies/backgrounds affect the levels of knowledge, practices such as appropriate hygiene and social distancing behaviors, and sometimes psychological health (i.e., anxiety, depression, etc.) (5, 12, 13–14). University students are independent of their families, forming their identities (15). They are very concerned about how they present themselves and how people see

them. In an emergency such as the COVID-19 pandemic, in which behaviors are strictly restrained, one's behavior is more frequent based on the viewpoints of their own and others. Self-consciousness (16) is considered to significantly influence young people's behavior as a factor determining their behavior. Another critical factor is personality. It can be assumed that the extroverted nature of actively interacting with others determines university students' range of action. The present study assessed the knowledge, attitude, and practice of El Imam El Mahdi University faculty of education at the Fourth-Class Level regarding the Coronavirus Outbreak, 2021-2022.

II.Materials And Methods

Study Design:

Cross-sectional study is community-based.

Study area:

The study was conducted in Kosti City among students of El Imam El Mahdi University's faculty of education at the fourth-class level.

Study population:

El Imam El Mahdi University students in the fourth class of the faculty of education.

Sample size and sampling technique:

The sample size was determined according to the Solvin formula;

 $n=N/1+n (e)^2$

Whereas;

N =Sample size

N = Population of the study = 196

e = marginal error

The sample was 192 students, and a stratified sample size was used. The sample size was calculated proportionally from five departments: the chemistry department (26) students, the Geography department (24) students, the Islamic Studies department (27) students, the Biology department (16) students, and other departments (37) students.

Data collection tools:

Data was collected through a questionnaire.

Data analysis:

Data was analyzed using SPSS version 20.0.

Score measurements:

For knowledge, a Score above \geq 75% was good; a score between 50-74% was moderate, and a score less than 50% was poor.

Attitude and perceptions:

A score between \geq 75% was a positive attitude and perceptions, and score between 50-74% was a moderate positive attitude, and a score of < 50% was a negative attitude.

Practice score: A score above $\geq 75\%$ was good; a score between 50-74% was moderate, and a score less than 50% was poor.

III.Results:

Table 1 indicates that 75% of the student's overall knowledge of coronavirus was good, and 25% was poor.

The vast majority, 98.5%, of the students knew the coronavirus. The majority of the students, 92.3%, knew that the virus was the cause of coronavirus. All the students learned how coronavirus is transmitted.

Only 28.5% of the students knew that air is how the coronavirus is transmitted. About 25% of the students learned that dry cough is a symptom of coronavirus, 17.7% fever, 15.4% nasal discharge, 16.9% breathing difficulties, and 30.8% other methods.

Only 27.7% knew that Esterazenca, Jonson, and fiber were the types of vaccines used against coronavirus.

Table 2 shows that 95.8% of students had a positive attitude toward coronavirus, and only 4.2% had a negative attitude.

The majority of students, 96.9%, agreed that persons with respiratory illness were more exposed to coronavirus. However, 94.6% of the students agreed that coronavirus is a factor that affects economics.

Table 3 shows that 83.3% of students had poor practice against coronavirus, while only 16.7% had good practice. About 27.6% of the students had good practice of Preventive measures for protection from

coronavirus. Only 16.7% of the students had good practice regarding wearing masks. Only 14.6% of the students had good practice regarding the symptoms they should be alerted to.

Response	No.	%				
Kn	ow the coronavirus					
Yes	128	98.5				
No	2	1.5				
Total	130	100.0				
Know the cause of the coronavirus.						
Bacteria	10	7.7				
Virus	120	92.3				
Total	130	100.0				
Know how	coronavirus is transmitted.					
Yes	130	100.0				
No	0	0.0				
Total	130	100.0				
Know how	coronavirus is transmitted.					
Air	37	28.5				
Water	4	3.1				
Contact	75	57.7				
Soil	4	3.1				
Other methods	10	7.7				
Total	130	100.0				
Know th	e coronavirus symptoms.					
Dry cough	25	19.2				
Fever	23	17.7				
Nasal discharge	20	15.4				
Breathing difficulties	22	16.9				
Other	40	30.8				
Total	130	100.0				
Know the ty	pes of coronavirus vaccines.					
Esterazenca	49	37.7				
Jonson and Jonson	15	11.5				
Fiber	30	23.1				
All mentioned is correct	36	27.7				
Total	130	100.0				
Overall knowledge						
Good	581	75.0				
Poor	199	25.0				

 Table 1. Knowledge of students about the virus

Table 2. The attitude of students about Coronavirus

Response	No.	%		
Persons who have respiratory illness were more exposed to coronavirus.				
Agree	126	96.9		
Disagree	4	3.1		
Total	130	100.0		
The coronavirus is a factor that affects the economy.				
Agree	123	94.6		
Disagree	7	5.4		
Total	130	100.0		
Overall attitudes				
Positive	249	95.8		
Negative	11	4.2		
Total	260	100.0		

Table 3.	The	practice of	students	about	the virus
----------	-----	-------------	----------	-------	-----------

Response	No.	%		
Preventive measures for protection from coronavirus were				
Isolation yourself when feeling by the disease	46	35.4		
Avoid direct contact	35	26.9		
Avoid health facilities visit	13	10.0		
All mentioned is correct	36	27.7		
Total	130	100.0		
Suitable time for wearing a mask				
When COVID-19 symptoms appeared	32	24.6		
When you care for a person who infected by Covid-19	62	47.7		
When feeling breathing difficulties	20	15.4		

All mentioned is correct	16	12.3		
Total	130	100.0		
The symptoms that should be alert were				
Fever at 37.8 degrees and above	29	22.3		
Nasal discharge, headache, and sore throat	45	34.6		
Returned from traveling during previous two weeks	11	8.5		
Contact with persons infected with Covid-19	26	20.0		
All mentioned is correct	19	14.6		
Total	130	100.0		
Overall	practices			
Good	71	16.7		
Poor	355	83.3		
Total	426	100.0		

IV.Discussion:

The current study assessed the knowledge, attitude, and practice of El Imam El Mahdi University's faculty of education at the Fourth-Class Level regarding the Coronavirus Outbreak, 2021-2022.

This study showed that the student's overall knowledge regarding coronavirus was found to be suitable among 75%, and 25% was poor. The study is in line with other studies that showed three-quarters (75.61%) of Vietnamese students had good COVID-19 knowledge, lower than results from studies in Bhutan (98%) (17), Ecuador (88%) (18),

Hochiminh, Vietnam (86.6%) (18), and Ethiopia (81.8%) (19), but these are far higher than results from studies in Indonesia (29.8%) (20) and China (28.3%) (21).

Moreover, the study indicated that 95.8% of students 95.8% had a positive coronavirus attitude, and only 4.2% had a negative attitude. This result is to some extent consistent with the findings of studies in Hochiminh, Vietnam (92.8%) (22), Pakistan (92.5%) (23), Italy (90.6%) (24), and Bhutan (86.6%) (17), but far higher than the results of studies in Ethiopia (70.9%) (19), China (67.8%, 73.81%) (25), and Indonesia (64.9%, 55.7%) (20, 26).

On the other hand, the study showed that the majority of students had poor practice against coronavirus, 83.3%, while only 16.7% had good practice. A slightly higher finding (34.4%) of good practices was observed in a study among university students in Bangladesh (27). The level of appropriate practices among Kandahar University students is relatively low compared to what is reported on medical students in India (90%), Pakistan (95%), and China (87.9%) (28, 29, 30), and among pharmacy workers in Pakistan (57.5%) (31).

V.Conclusions:

The study concludes that there was a high level of knowledge and a positive attitude regarding coronavirus, but there was poor practice. The obtained results on the status of KAP toward COVID-19 among university students can play vital roles in planning and confirming the countermeasures for the young generation in COVID-19 prevention.

References:

- [1] Coronavirus Disease (Covid-19)–World Health Organization. [Cited 22 Oct 2020]. Available: Https://
 - Www.Who.Int/Emergencies/Diseases/Novel-Coronavirus-2019.
- [2] Center For Systems Science And Engineering (Csse). Covid-19 Map—Johns Hopkins Coronavirus Resource Center. 2020. [Cited 22 Oct 2020]. Available: Https://Coronavirus.Jhu.Edu/Data.
- [3] Bhatti Js, Bhatti Gk, Khullar N, Reddy Ap, Reddy Ph. Therapeutic Strategies In The Development Of Anti-Viral Drugs And Vaccines Against Sars-Cov-2 Infection. Mol Neurobiol. 2020; 57: 4856–4877.
- [4] Liu C, Zhou Q, Li Y, Garner Lv, Watkins Sp, Carter Lj, Et Al. Research And Development On Therapeutic Agents And Vaccines For Covid-19 And Related Human Coronavirus Diseases. Acs Cent Sci. 2020; 6: 315–331.
- [5] Zhong B-L, Luo W, Li H-M, Zhang Q-Q, Liu X-G, Li W-T, Et Al. Knowledge, Attitudes, And Practices Towards Covid-19 Among Chinese Residents During The Rapid Rise Of The Covid-19 Outbreak: A Quick Online Cross-Sectional Survey. Int J Biol Sci. 2020; 16: 1745–1752.
- [6] Ajilore K, Atakiti I, Onyenankeya K. College Students' Knowledge, Attitudes And Adherence To Public Service Announcements On Ebola In Nigeria: Suggestions For Improving Future Ebola Prevention Education Programs. Health Education Journal. 2017; 76: 648–660.
- [7] Moreno C, Wykes T, Galderisi S, Nordentoft M, Crossley N, Jones N, Et Al. How Mental Healthcare Should Change As A Consequence Of The Covid-19 Pandemic. The Lancet Psychiatry. 2020; 7: 813–824.
- [8] Sutin Ar, Luchetti M, Aschwanden D, Lee Jh, Sesker Aa, Strickhouser Je, Et Al. Change In Five-Factor Model Personality Traits During The Acute Phase Of The Coronavirus Pandemic. Plos One. 2020; 15: E0237056.
- [9] Fetzer Tr, Witte M, Hensel L, Jachimowicz J, Haushofer J, Ivchenko A, Et Al. Global Behaviors And Perceptions At The Onset Of The Covid-19 Pandemic. National Bureau Of Economic Research; 2020 May. Report No.: 27082.
- [10] Covid-19 International Student Well-Being Study—University Of Antwerp. [Cited 6 Nov 2020]. Available:
- Https://Www.Uantwerpen.Be/En/Research-Groups/Centre-Population-Family-Health/Research2/Covid-19-Internation/.
- [11] Covid-19 International Student Well-Being Study. [Cited 6 Nov 2020]. Available: Https://Zenodo.Org/ Communities/C19-Isws/?Page=1&Size=20/.

- [12] Olaimat An, Aolymat I, Elsahoryi N, Shahbaz Hm, Holley Ra. Attitudes, Anxiety, And Behavioral Practices Regarding Covid-19 Among University Students In Jordan: A Cross-Sectional Study. The American Journal Of Tropical Medicine And Hygiene. 2020; 103: 1177–1183.
- [13] Cao W, Fang Z, Hou G, Han M, Xu X, Dong J, Et Al. The Psychological Impact Of The Covid-19 Epidemic On College Students In China. Psychiatry Research. 2020; 287: 112934.
- [14] Odriozola-Gonza Lez P, Planchuelo-Go Mez A', Irurtia Mj, De Luis-Garc Ta R. Psychological Effects Of The Covid-19 Outbreak And Lockdown Among Students And Workers Of A Spanish University. Psychiatry Research. 2020; 290: 113108.
- [15] Erikson E.H., 1950, Childhood And Society, (2nd Ed.), New York: Norton. Pmid: 14775578.
- [16] Fenigstein A, Scheier Mf, Buss Ah. Public And Private Self-Consciousness: Assessment And Theory. Journal Of Consulting And Clinical Psychology. 1975; 43: 522–527.
- [17] Dorji T, Wangmo K, Yezer, Wangchuk T, Tshokey, Wangdi K. Knowledge, Attitude, And Practice Toward Covid-19 Among Sherubtse College Students In Bhutan: A Web-Based Cross-Sectional Study. Front Public Health. 2021;9:721493.
- [18] Lincango-Naranjo E, Espinoza-Suarez N, Solis-Pazmino P, Vinuezamoreano P, Rodriguez-Villafuerte S, Lincango-Naranjo J, Et Al. Paradigms About The Covid-19 Pandemic: Medical Students' Knowledge, Attitudes And Practices. Bmc Med Educ. 2021;21(1):128.
- [19] Yesuf M, Abdu M. Knowledge, Attitude, Prevention Practice, And Associated Factors Toward Covid-19 Among Preparatory School Students In Southwest Ethiopia, 2021. Plos One. 2022;17(1): E0262907.
- [20] Adli I, Widyahening Is, Lazarus G, Phowira J, Baihaqi La, Arifandi B, Et Al. Knowledge, Attitude, And Practice Related To The Covid-19 Pandemic Among Undergraduate Medical Students In Indonesia: A Nationwide Cross-Sectional Study. Plos One. 2022;17(1): E0262827.
- [21] Zhang J, Yin Y, Dean J, Zhang X, Zhang Y, Wang J, Et Al. Knowledge, Attitude, And Practice Survey Of Covid-19 Among Healthcare Students During The Covid-19 Outbreak In China: An Online Cross-Sectional Survey. Front Public Health. 2021;9: 742314.
- [22] Le An P, Huynh G, Nguyen Htn, Pham Bdu, Nguyen Tv, Tran Ttt, Et Al. Knowledge, Attitude, And Practice Towards Covid-19 Among Healthcare Students In Vietnam. Infect Drug Resist. 2021;14:3405–13.
- [23] Noreen K, Rubab Ze, Umar M, Rehman R, Baig M, Baig F. Knowledge, Attitudes, And Practices Against The Growing Threat Of Covid-19 Among Medical Students Of Pakistan. Plos One. 2020;15(12): E0243696.
- [24] Santangelo Oe, Provenzano S, Armetta F, Pesco G, Allegro A, Lampasona M, Et Al. Knowledge, Attitudes, And Practices Towards Covid-19 Among Nursing Students Of The University Of Palermo: Results From An Online Survey. J Prev Med Hyg. 2021;62(2):E270–6.
- [25] Peng Y, Pei C, Zheng Y, Wang J, Zhang K, Zheng Z, Et Al. A Cross-Sectional Survey Of Knowledge, Attitude, And Practice Associated With Covid-19 Among Undergraduate Students In China. Bmc Public Health. 2020;20(1):1292.
- [26] Giovanni Ly, Suryadinata H, Sofatin Y, Rakhmilla Le, Ruslami R. Knowledge, Attitude, And Practice Of Undergraduate Medical Students In Indonesia On The Covid-19 Prevention. J Prev Med Hyg. 2021;62(3):E598–604.
- [27] Rahman Mm, Khan Sj, Sakib Ms, Halim Ma, Rahman Mm, Asikunnaby. Covid-19 Responses Among University Students Of Bangladesh: Assessment Of Status And Individual View Toward Covid-19. J Hum Behav Soc Environ. 2021;31(1–4):512–31.
- [28] Noreen K, Rubab Zil-E, Umar M, Rehman R, Baig M, Baig F. Knowledge, Attitudes, And Practices Against The Growing Threat Of Covid-19 Among Medical Students Of Pakistan. Plos One. 2020;15(12 December):1–12.
- [29] Maheshwari S, Gupta P, Sinha R, Rawat P. Knowledge, Attitude, And Practice Towards Coronavirus Disease 2019 (Covid-19) Among Medical Students: A Cross-Sectional Study. J Acute Dis. 2020;9(3):100.
- [30] Peng Y, Pei C, Zheng Y, Wang J, Zhang K, Zheng Z, Et Al. A Cross-Sectional Survey Of Knowledge, Attitude, And Practice Associated With Covid-19 Among Undergraduate Students In China. Bmc Public Health.2020;20(1):1292.
- [31] Muhammad K, Saqlain M, Muhammad G, Hamdard A, Naveed M, Butt Mh, Et Al. Knowledge, Attitude, And Practices (Kaps) Of Community Pharmacists Regarding Covid-19: A Cross-Sectional Survey In 2 Provinces Of Pakistan. Disaster Med Public Health Prep [Internet]. 2021 Feb 16 [Cited 2022 Jan 18];1–9.