IJPSR (2022), Volume 13, Issue 6 **(Research Article)**

INTERNATIONAL JOURNAL OF PHARMACEUTICAL SCIENCES AND RESEARCH

Received on 29 September 2021; received in revised form, 11 December 2021; accepted, 22 April 2022; published 01 June 2022

A QUESTIONNAIRE STUDY ON THE KNOWLEDGE, ATTITUDE AND THE PRACTICE OF COVID-19 AMONG MEDICAL STUDENTS IN A TERTIARY CARE HOSPITAL IN AJMER, RAJASTHAN

Arun Kumar Sharma * and Vandana Goyal

Department of Pharmacology, J. L. N. Medical College, Ajmer - 305001, Rajasthan, India.

Keywords:

Covid-19, Knowledge, Attitude and practice (K.A.P.), Medical students, Pandemic, N-95 mask

Correspondence to Author:
Dr. Arun Kumar Sharma

Assistant Professor,
Department of Pharmacology, J. L. N. Medical College, Ajmer - 305001, Rajasthan, India.

E-mail: pharma.sharm@yahoo.in

ABSTRACT: Background: Covid-19 has become a global threat. All most all the countries are facing this pandemic. This pandemic has greatly affected the medical education and medical students who are tomorrow's doctors. So, they need to have a wide awareness regarding the knowledge, attitude, and practice towards this Covid-19 infection. **Objective:** To study the knowledge, attitude, and practice of medical students regarding the Covid-19 pandemic. **Material and Method:** This descriptive and cross-sectional study was conducted on 260 medical students of J.L.N. Medical College, Ajmer (Rajasthan). A total of 20 questionnaires in which, 10 in the knowledge section, 5 each in the attitude and practice section, were provided in July - August, 2021. **Results:** A total of 260 responses were collected and studied. The male to female ratio in the study population was 0.91. A total of 54.46% of students gave correct responses regarding the knowledge section. 87.31% of students show a positive attitude towards vaccination. Overall positivity regarding attitude was 76.61%. 95 % of Students were proactive regarding washing their hands, and 96.53% were proactive about face masks which are the important measures for the prevention of Covid-19 infection. **Conclusion:** This study focused the knowledge, attitude and practice (K.A.P.) of medical students regarding Covid-19 pandemic. Overall K.A.P. score was 75.92%, indicating that medical students have good awareness regarding this pandemic. However some students are required to be more educated on knowledgeable sections such as various diagnostic methods for Covid-19 and practices on proper disposal of N-95 masks *etc*.

INTRODUCTION: Coronavirus disease (Covid-19) is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first known case of Covid-19 was identified in Wuhan, China in December 2019 [1]. Due to the initial outbreak in Wuhan, the virus and the disease was commonly referred as "coronavirus" and "Wuhan coronavirus", sometimes disease was also termed as Wuhan pneumonia [2-5].

QUICK RESPONSE CODE

DOI: 10.13040/IJPSR.0975-8232.13(6).2458-64

This article can be accessed online on www.ijpsr.com

DOI link: http://dx.doi.org/10.13040/IJPSR.0975-8232.13(6).2458-64

China reported to the world health organization (WHO) on 31st December 2019 [6-8]. WHO announced this disease as a global pandemic on 11th march 2020 [9]. In India, the first case of Covid-19 was reported on 30 January 2020 [10]. Covid-19 is a contagious disease and spreads from human to human primarily through respiratory droplets and potentially aerosol transmission [11-13].

Touching a contaminated surface or object may also lead to infection, although this does not contribute substantially to transmission [14-15]. The symptoms of Covid-19 infection are variable, ranging from mild to severe illness. It includes fever, cough, sore throat, fatigue and myalgia. In severe cases, it could lead to pneumonia,

respiratory failure, cardiac arrest and death [16]. These symptoms are divided into three common clusters *i.e.*, respiratory symptom cluster (cough, sputum, shortness of breath, and fever), musculoskeletal symptom cluster (muscle and joint pain, headache, and fatigue), and digestive symptom cluster (abdominal pain, vomiting, and diarrhoea) [17]. Several testing methods have been developing to diagnose the disease, such as real-time reverse transcription-polymerase chain reaction (rRT-PCR), transcription-mediated amplification (T.M.A.), and reverse transcription loop-mediated isothermal amplification (RT-LAMP) [18]. Many treatments have been proposed to treat patients with Covid-19. To date, only dexamethasone has been shown to be effective in well-conducted clinical trials, including the U.K. recovery trial and the WHO solidarity trial [19-20;] however, the primary treatment is symptomatic which involves the treatment of symptoms, supportive care, isolation and experimental measure. Currently, preventive measures including social distancing, regular hand sensitization, regularly wiping surfaces, quarantining, wearing a face masks, and lockdown are the most effective methods to reduce the virus's spread and its subsequent morbidity and mortality [12, 21-24].

To prevention of Covid-19, several vaccine have been developed and approved and distributed in various countries, which have since initiated mass vaccination campaigns. All this information about Covid-19 and its prevention has been unfolded to the general public via newspapers, social media, radio, T.V. news channels, and posters in the public palace. WHO, Ministry of Health and Family Welfare, govt. of India (MOHFW), local public health authorities, and the medical fraternity are regularly updating information about the disease and its preventive measures [25].

This outbreak put the entire education system in unprecedented difficult situations. Medical students are the future healthcare force and are at equal risk of getting infected and transmitting this infection to their parents, friends and families, and others. Keeping this in mind Rajasthan government started online education/training not only for these medical students but also for students of other fields, a good step taken by the government to reduce further transmission of this outbreak.

Therefore, their perceptions and behaviours were posited to be greatly affected by the pandemic, which needs to be explored. It becomes important to understand how much they know about this novel coronavirus, how they feel about this outbreak, and what all preventive measures they are practicing. Keeping all this in mind, the present study is designed.

Objective: To understand the knowledge, attitude, and practice of medical students regarding the Covid-19 pandemic.

MATERIAL & METHOD:

Source of Data: Undergraduate medical students studying in J.L.N. Medical College & Associated Group of Hospitals, Ajmer (Rajasthan).

Protocol: This was a descriptive and cross-sectional study. It was conducted after obtaining approval from the institutional ethics committee (approved on 13/07/2021). The approval letter was dispatched on 04/09/2021 wide order no. 1800/Acad – III/MCA/2021.

Sample size: Sample size was calculated by using a confidence level of 95%, the margin of error 5%, response distribution of 50 %, and population size of 750. We obtained several 255 for convince a total of 260 medical students were included in this study.

Methodology: Present study was performed only after obtaining approval from the institutional ethics committee and consent from participants. Initially, as the government allowed the online classes for Ist & II MBBS as a preventive measure for COVID-19. Later on, after a decline in a number of Covid cases and unlock was started, the Government allowed offline classes for MBBS students in phase-wise manner *i.e* first for final MBBS then second and Ist MBBS students. Present study subjects (medical student) was provided a set of a questionnaire related to knowledge, attitude and practice (K.A.P.) regarding the Covid-19 pandemic through google form and printed form as they are convenient. A questionnaire set was provided in the month of August 2021 and September 2021. A Google form link was sent to all participating medical students of J.L.N. Medical College, Ajmer. Questionnaire content was validated by the departmental research committee.

A common scoring method was used for this K.A.P. Questionnaire as follows:

In Knowledge Section: 1 point for correct and 0 for incorrect option.

In Attitude Section: 2 points for positive, 1 point for neutral, and 0 points for negative option.

In Practice Section: 2 points for proactive, 1 point for neutral, and 0 points for passive option. There are 10 questionnaires in the knowledge section, 5 each in the attitude section and practice section. The score ranges were 0-10 each for the knowledge, attitude, and practice section and 0-30 for total K.A.P.

Statistical Analysis: All data were entered in an M.S. Excel spreadsheet. The categorical variable was expressed as frequency and percentage. Data were analyzed by using appropriate statistical tests or using Epi info software.

RESULTS: A total of 260 responses were received and studied. Results are shown in tabulated from **Tables 1** to **4**.

Demographic Characteristics of the participants are shown in **Table 1.** All the participants were in age group of 17-26 years. Maximum numbers (51.54 %) belong to 17-20 years age group, and the minimum were in 24-26 years age group (2.31 %). The mean age was 20.546 ± 1.509 years. Of 260 medical students, the male to female ratio was 0.91.

TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Measures	No. of Participants	Percents of Participants
Age Group		
17-20	134	51.54
21-23	120	46.15
24-26	6	2.31
Gender		
Male	124	47.69
Female	136	52.31

Knowledge-Based Questionnaires are discussed in **Table 2**. It is evident from this table that almost all participants (no. - 253) heard about Covid-19. 95.38% knew that the novel coronavirus is transmitted mainly through respiratory droplets and close contacts. 94.23% of students correctly responded regarding the main clinical symptoms of Covid-19. 35.38% gave correct responses regarding official names for coronavirus disease, *i.e.*, Covid-19 and SARS –CoV issued by WHO. 90.38% of students were not aware of the names of diagnostic methods to diagnose the covid-19. 33.46% knew the correct date of reporting of the first case of Covid-19 in India. 96.54% responded correctly about the first known case of this disease from, *i.e.*, Wuhan (China). 36.15% of participants correctly respond about the incubation period of Covid-19. Only 22.31% responded with correct answers about the system affected by Covid-19. 75.77% of students did not know the date on which WHO confirmed human to human transmission of this disease. Overall, 54.46% gave a correct responses to the knowledge based questionnaire, whereas 45.54% lacked this awareness regarding knowledge of Covid-19.

Table 3 shows the attitude of students towards this disease. 35.39% of students show a positive attitude regarding being scared of doing their hospital/college work. Most the students (95%) think that this pandemic has impacted their studies. They (85%) believe that this Covid-19 pandemic will be controlled by using standard and isolation precautions gave by WHO and the Ministry of health and family welfare, govt. of India. 80.38% show a positive attitude towards their pets when they suspect flu-like symptoms. 87.31% were positive for vaccinations to the prevention this pandemic. Overall, 76.61 % of participants have a positive attitude, 8.62% have a neutral, and 14.77% possess a negative attitude regarding this pandemic. Practice related to Covid-19 was assessed by 5 questionnaires which are described in **Table 4**. 96.53% of students were proactive with face masks when they are outside or in public places. 63.08 % of students discard N-95 / triple layered masks properly after use. 96.54 % of participants indicate proactive when they get Covid-19 infection. 95% of students are proactive regarding washing their hands when they come from hospital/college/public places. 86.54% indicate proactive regarding covering their mouth and face when they cough. Overall, 87.54% show proactive practice, 9.69% neutral and 2.77 % negative practice regarding this Covid-19. Overall K.A.P. score was 75.92 %, indicating that medical students have good awareness regarding this pandemic.

TABLE 2: RESPONSE TO KNOWLEDGE-BASED QUESTIONS

Questions with options	Correct response		Incorrect response	
	No.	%	No.	%
Q.1. Did you heard about COVID– 19? (A) Yes (B) No	253	97.31	7	2.69
Q. 2. Novel Corona virus transmission occurs mainly through- (A) Respiratory droplets and close contact (B) Water (C) Touching a contaminated surface or object (D) Food	248	95.38	12	4.62
Q. 3. What are the main clinical symptoms of COVID – 19? (A) Fever and dry cough (B) Vomiting and loose stool (C) Eye congestion (D) Stuffy and runny nose	245	94.23	15	5.77
Q. 4. Official name for corona virus disease i.e COVID – 19 and SARS – CoV-2 were issued by WHO on- (A) 11 December 2019 (B) 11 January 2010 (C) 11 February 2020 (D) 11 March 2020	92	35.38	168	64.62
Q. 5. The standard diagnostic method to diagnose the COVID – 19 : – (A) rRT-PCR (B) TMA (C) R.T. – LAMP (D) All of the above	25	9.62	235	90.38
Q. 6. First case of covid – 19 in India was reported on- (A) 15 January 2020 (B) 20 January 2020 (C) 25 January 2020 (D) 30 January 2020	87	33.46	173	56.54
Q. 7 The first known case of COVID – 19 from- (A) London (UK) (B) Mumbai (India) (C) Wuhan (China) (D)Moscow (Russia)	251	96.54	9	3.46
Q. 8. What is the incubation period of covid -19? (A) 1 -3 days (B) 3 -7 days (C) 7 -14 days (D) 1 -14 days	94	36.15	166	63.85
Q. 9. Which system is affected by covid -19 – (A) Respiratory system (B) Cardiovascular system (C) Gastrointestinal system (D) All of the above	58	22.31	202	77.69
Q. 10. WHO confirmed human–to–human transmission by- (A) 5 Jan 2020 (B) 10 Jan 2020 (C) 15 Jan 2020 (D) 20 Jan 2020	63	24.23	197	75.77
Total	1416	54.46	1184	45.54

TABLE 3: RESPONSE TO ATTITUDE-BASED QUESTIONS

Q. no.	Questions with options	Responses		
		Positive (No. and %)	Neutral (No. and %)	Negative (No. and %)
1	Are you scared of doing your hospital/college work – (A) Yes (B) No (C) I don't know	92 (35.39 %)	23 (8.85%)	145 (55.76%)
2	Do you think this pandemic has impacted your study/ practice? (A) Yes (B) No (C) I don't know	247 (95 %)	3 (1.15 %)	10 (3.85 %)
3	Do you think that this Covid-19 pandemic situation will be controlled by using standard and isolation precaution given by WHO and Ministry of health & family welfare, *etc.* (A) Yes (B) No (C) I don't know	221 (85 %)	20 (7.7 %)	19 (7.3 %)
4	If you suspect flu like symptoms, what's your attitude towards your pets or animals – (A) Avoid contact with them (B) I don't know (C) I will spend time with them	209 (80.38 %)	39 (15 %)	12 (4.62 %)
5	Do you agree that vaccinations for COVID-19 will be helpful for prevention of this pandemic? (A) Yes (B) No (C) I don't know	227 (87.31 %)	27 (10.38 %)	6 (2.31 %)
	Total	76.61 %	8.62 %	14.77 %

TABLE 4: RESPONSE TO PRACTICE-BASED QUESTIONS

Q. no.	Questions with options	Responses		
		Proactive	**Neutral**	**Passive**
1	Do you wear face mask when you are at outside and/or in public places – (A) Always (B) Sometimes (C) Never	251 (96.53 %)	5 (1.92 %)	4 (1.52 %)
2	Do you properly discard N-95 / triple layered mask after uses? (A) Always (B) Sometimes (C) I don't know	164 (63.08 %)	82 (31.54 %)	14 (5.38)
3	What would you do if you had covid -19 infection – Report to the community and follow guidelines issued by the Ministry of health & family welfare govt. of India. I don't know what to do. I live with my family	251 (96.54 %)	2 (0.77 %)	7 (2.69 %)
4	Do you wash your hands after coming from a hospital/college or another public place? (A) Always (B) Sometimes (C) Never	247 (95 %)	9 (3.46 %)	4 (1.54 %)
5	Do you cover your mouth and nose with a tissue/ handkerchief or elbow while coughing? (A) Always (B) Sometimes (C) Never	225 (86.54 %)	28 (10.77 %)	7 (2.69 %)
	Total	87.54 %	9.69 %	2.77 %

DISCUSSION: Covid-19 is a global pandemic. All most all the countries are fighting this disease. Medical students are future doctors; being a part of the future healthcare force, it is essential to be well aware of Covid-19 disease. In case of an emergency and shortage of healthcare workers, medical students are the first priority option to be a consideration for fighting this Covid-19 infection. So, therefore it is essential to know their knowledge, attitude, and practice about Covid-19. Many studies were carried to assess the Covid-19 – knowledge, attitude, and practice (K.A.P.) among medical students worldwide. Adequate knowledge, attitude, and practice can help to prevent in further transmission of this disease. Therefore we done a cross-sectional study on medical students of J.L.N. Medical College, Ajmer; a tertiary care center in Rajasthan.

In our study, 36.15% of medical students were aware of the incubation period of coronavirus. Ambika Sharma *et al.* found that 88.5% of students correctly answered about the incubation period of 1-14 days [25]. Bhagavathula AS *et al.* conducted a similar study, which showed 33% of healthcare workers acquired knowledge about this disease [26].

One another study found that 29.2% of healthcare workers were aware of the incubation period.[27] In our study, 95.38% know that modes of transmission are respiratory droplets and close contacts. Our results regarding knowledge of the mode of transmission are akin to a study done by Ambika Sharma and Taghrir *et al.* [25, 28]. Students (94.23%) were aware of the main clinical symptoms of Covid-19, *i.e.*, fever and dry cough. These findings were comparable to studies done by Ambika Sharma, Taghrir *et al.* and Hamed Alzoubi *et al.* [25, 28, 29] 77.69% did not know that besides the respiratory system, Covid -19 infections can affect other body systems also, *i.e.*, the gastrointestinal system, cardiovascular system, *etc*. In our study, most students (76.61%) had an overall a good positive attitude.

Most of them feel that this pandemic is dangerous and affecting their study and hospital/college work. 85% of students believe that the Covid-19 pandemic situation will be controlled by using standard and isolation precautions given by WHO and the Ministry of health and family welfare, Govt. of India. 87.31 % of participants believe that Covid vaccination will also be helpful for the

prevention of this pandemic. These findings were akin to a study carried out by Ambika Sharma, Huynh Giao, *et al.* and Alzoubi H *et al.* [25, 29, 30]. In the present study, we also looked into practices adopted by medical students in their routine life. The majority of participants had good proactive regarding the use of face masks and their proper disposal after use.

95% of participants had proactive in washing their hands when they came from a hospital/college or another public place. They also proactively cover their mouth and nose with a tissue/handkerchief or elbow while coughing. Similar findings were observed in other studies [25, 28, 29, 31].

Overall our study participants showed good knowledge, a positive attitude, and proactive practice regarding the prevention of this pandemic. The main limitation of this study was that it was a single-center study. The results of the present study cannot truly represent the knowledge, attitude, and practice of medical students worldwide; hence, much needs to carry further such type of study in other medical colleges also.

CONCLUSION: From the present study, it can be concluded that medical students showed good basic information (knowledge), possessed a positive attitude, and presented proactive practice toward this Covid-19 infection. However, a small part of the study participants is required to be more educated on the knowledge of the diagnostic methods for Covid-19 and properly dispose of N-95/triple layered mask after use.

ACKNOWLEDGEMENT: Authors are very grateful and sincere thank the departmental staff members and students of J. L. N. Medical College, Ajmer, Rajasthan (India), for their immense corporation.

CONFLICT OF INTEREST: None

REFERENCES:

1. Page J, Hinshaw D and McKay B: In Hunt for Covid-19 Origin, Patient ZeroPoints to Second Wuhan Market – The man with the first confirmed infection of the new coronavirus told the WHO team that his parents had shopped there. The Wall Street Journal Retrieved 2021; 27.
2. McNeil DG: Wuhan coronavirus looks increasingly like a pandemic, experts say. The New York Times ISSN 0362-4331. Retrieved 4 April 2020. //www.worldcat.org/issn/0362-4331).
3. Griffiths J: Wuhan coronavirus deaths spike again as outbreak shows no signs of slowing. CNN. Retrieved 4 April 2020. (https://www.cnn.com/2020/02/05/asia/wuhan-coronavirus-update-death-toll-spike-intl-hnk/index.html).
4. Jiang S, Xia S, Ying T and Lu L: A novel coronavirus (2019-nCoV) causing pneumonia-associated respiratory syndrome. Cellular & Molecular Immunology 2020; 17(5): 554. doi: 10.1038/s41423-020-0372-4.
5. Chan JF, Yuan S, Kok KH, To KK, Chu H and Yang J: (February 2020). "A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. Lancet 395(10223): 514–523. doi: 10.1016/S0140-6736(20)30154-9.
6. Deng SQ and Peng HJ: Characteristics of and public health responses to the coronavirus disease 2019 outbreak in China. J Clin Med 2020; 9(2): 575.
7. WHO. COVID-19 Public Health Emergency of International Concern (PHEIC) – Global research and innovation forum; February 12, 2020. Available from: https://www.who.int/publica tions/m/item/covid-19-public-health-emergency-of-international- concern-(pheic)-global-research-and-innovation-forum.
8. Li Q, Guan X and Wu P: Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. N Engl J Med 2020; 382(13): 1199–1207.
9. WHO. Coronavirus disease (COVID-2019). Available from: https://www.who.int/emergencies/diseases/novel-coronavirus -2019. Accessed January 11, 2021.
10. Perappadan and Bindu Shajan: (30 January 2020). India's first coronavirus infection confirmed in kerala. The Hindu ISSN 2021; 097 –751.
11. WHO. Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations. Scientific Brief 29 March 2020. Available from: https://www.who.int/news-room /commentaries/detail/modes-of-transmission-of-virus-causing- covid-19-implications-for-ipc-precaution-recommendations.
12. Pradhan D, Biswasroy P, Kumar Naik P, Ghosh G and Rath G: A review of current interventions for COVID-19 prevention. Arch Med Res 2020; 51(5): 363–374.
13. Klompas M, Baker MA and Rhee C: Airborne transmission of SARS-CoV-2: theoretical considerations and available evidence. JAMA 2020; 324(5): 441–442.
14. C.D.C. (11 February 2020). Scientific Brief: SARS-CoV-2 Transmission. Centers for Disease Control and Prevention. (https://www.cdc.gov/coro navirus/2019-ncov/science/science-briefs/sars-cov-2-transmission.html).
15. "Transmission of COVID-19". www.ecdc.europa.eu. (https://www.ecdc.europa.eu/en/covid-19/latest-evidence/transmissi on)
16. Chen N, Zhou M and Dong X: Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. Lancet 2020; 395 (10223): 507–513.
17. Clinical characteristics of COVID-19. European Centre for Disease Prevention and Control. Retrieved 29 December 2020. (https://www.ecdc.europa.eu/en/covid-19/latest-evidence/cli nical).
18. Li C, Zhao C and Bao J: Laboratory diagnosis of coronavirus disease – 2019 (Covid -19). Clinica Chimica Acta. International Journal of Clinical Chemistry 2020; 510: 35-46.

19. Abubakar AR, Sani IH and Godman B: Systematic review on the therapeutic options for COVID-19: clinical evidence of drug efficacy and implications. Infect Drug Resist 2020; 13: 4673.
20. Dyer O: Covid-19: remdesivir has little or no impact on survival, WHO trial shows. BMJ 2020; 371: m4057. doi:10.1136/bmj.m4057
21. Feng S, Shen C, Xia N, Song W, Fan M and Cowling BJ: Rational use of face masks in the COVID-19 pandemic. Lancet Respir Med 2020; 8(5): 434–436.
22. Nussbaumer-Streit B, Mayr V and Dobrescu AI: Quarantine alone or in combination with other public health measures to control COVID-19: a rapid review. Cochrane Database Syst Rev 2020; 4(4): Cd013574. doi:10.1002/14651858.CD013574.
23. Courtemanche C, Garuccio J, Le A, Pinkston J and Yelowitz A: Strong social distancing measures in the United States reduced the COVID-19 growth rate. Health Aff. 2020; 39(7): 1237–1246.
24. Chu DK, Akl EA, Duda S, Solo K, Yaacoub S, Schünemann HJ. Physical distancing, face masks and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. Lancet 2020; 395 (10242): 1973–1987.
25. Ambika Sharma: Covid -19 knowledge, attitude and practice among medical students. International Journal of Scientific Research 2020; 9(7): 6-8.
26. Bhagavathula AS, Aldhaleei WA, Rahmani J, Mahabadi MA and Bandari D.K.: Knowledge and Perceptions of COVID-19 Among Health Care Workers: Cross-Sectional Study. JMIR Public Health Surveill 2020; 6(2): e19160.
27. Anjali Sharma, Manju Sharma and Heena: Assessment of all novel corona virus (covid -19) awareness among medical laboratory technologist in a tertiary care hospital in Delhi: A questionnaire based survey. International Journal of Scientific Research. August 2020; 8(9): 7-11.
28. Taghrir MH, Borazjani R and Shiraly R: COVID-19 and Iranian Medical Students; A Survey on Their Related-Knowledge, Preventive Behaviors and Risk Perception. Arch Iran Med 2020; 23(4): 249-254.
29. Hamed Alzoubi, Nedal Alnawaiseh, Asma'a Al-Mnayyis, Mohammad Abu- Lubada, Amin Aqel and Hani Al-Shagahin: COVID-19 – Knowledge, Attitude and Practice among Medical and Non-Medical University Students in Jordan, J. Pure Appl. Microbiol 2020; 14(1): 17-24.
30. Huynh G, Nguyen T.N.H., Tran VK, Vo KN, Vo VT and Pham LA: Knowledge and attitude toward COVID-19 among healthcare workers at District 2 Hospital, Ho Chi Minh City. Asian Pac J Trop Med 2020; 13.
31. Modi PD, Nair G and Uppe A: COVID-19 Awareness among Healthcare Students and Professionals in Mumbai Metropolitan Region: A Questionnaire-Based Survey. Cureus 2020; 12(4): 7514.

How to cite this article:
Sharma AK and Goyal V: A questionnaire study on the knowledge, attitude and the practice of Covid-19 among medical students in a tertiary care hospital in Ajmer, Rajasthan. Int J Pharm Sci & Res 2022; 13(6): 2458-64. doi: 10.13040/IJPSR.0975-8232.13(6).2458-64.

All © 2022 are reserved by International Journal of Pharmaceutical Sciences and Research. This Journal licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.

This article can be downloaded to **Android O.S.** based mobile. Scan QR Code using Code/Bar Scanner from your mobile. (Scanners are available on Google Playstore)