



## KNOWLEDGE, ATTITUDE AND PRACTICE AMONG FIRST PHASE MEDICAL STUDENTS ON COVID 19

**Dr. Jadhav Bhaudas Khanderao**

Professor and Head Anatomy department Dr. Vasantao Pawar medical college Nashik.

### ABSTRACT

**Objectives:** 1) To assess knowledge, attitude and practice among medical students on Covid 19 of Maharashtra region

**METHOD:** Study design was cross sectional study with the Study duration – 2 months and the Sample size was 244 medical students. The Sampling technique – Google form sent on email and whatsapp

**RESULTS:** We found that Students voluntarily participating in this study were mostly from first year (148). We found that 57% female students participated in our study and they are found more health conscious and had good practice which they had achieved because of good knowledge from different sources.

**CONCLUSION:** Our students had demonstrated sound knowledge, and possessed optimistic attitudes and low-risk practices toward prevention of COVID-19. In our study we found that students able to collect correct information from trusted sources and developed positive attitudes and healthy practices

**KEYWORDS :** KAP studies, Covid 19

### INTRODUCTION

During second wave of Covid 19 pandemic almost all age groups are affected mild to severe grades. Medical students and their family are not exception to this. This disease causes flue like symptoms affecting mainly nose and throat region and respiratory system. They started attending online classes instead of offline classes. They fear about the health status of their family and relatives. They also suffer academic loss and scary about the future. Governments have adopted restrictive measures such as quarantine, isolation, and physical distancing, the suspension of any social event, and the closure of schools and universities to reduce transmission of the virus Covid 19 has caused mild to severe disease and some deaths also. Symptoms and treatment modalities are rapidly evolving as per ICMR studies and WHO guidelines. Students are representative of their home town or districts all over the Maharashtra state. In this study we want to assess the updated knowledge, positive or negative attitude and practice of budding doctors about this new epidemic which had affected almost all the world.

### MATERIAL AND METHODS

This study was conducted in department of human anatomy Dr. Vasantao Pawar medical college and research center Nashik. A self-designed questionnaire will be prepared and given to the all phases of students across most of the medical colleges at Maharashtra state India. The demographics, present knowledge, attitude, and practice of the participants toward Covid 19 were investigated and. The Ethics Committee of Dr. Vasantao Pawar medical college Nashik had approved our study protocol and procedures of informed consent before the formal survey. Participants had to answer by filling a Google form questionnaire to confirm their willingness to participate voluntarily. Google form link was distributed with medical students of many medical college of Maharashtra state. Response was recorded in the Google drive. The questionnaire consisted of two parts: demographics and KAP. Demographic variables included age, gender, academic year, and place of current residence.

### RESULTS

**Table no. 1 Demographic information of participants**

Variable	Number ( N=244)	Percentage
Gender		
Male	104	42.62
Female	140	57.37
Year		
First	148	60.24

Second	38	15.57
Third	28	11.47
Final	14	5.73
intern	17	6.96
Region		
Western Maharashtra	145	59.42
Marathwada	40	16.39
Vidharbh	35	14.34
Mumbai	24	9.83

This tables shows that first year students had taken more interest in participation of studies ( 60%) and female students participated more than male ( 57%). Participants were maximum from western Maharashtra (59%)

**Table No. 2 Questionnaire Of Knowledge**

Sr. no.	Questions	Total no of students given right answers (N=244)	Percentage
1	Do you know that the main clinical symptoms of COVID-19 are	226	93 %
2	Which cases with Covid 19 will progress to severe cases?	168	69%
3	What is incubation period of the COVID-19 virus?	175	72%
4	How the Persons with COVID-2019 can transmit the virus to others	239	98%
5	Which of the following extra precautions children and young adults must take to prevent the infection by the COVID-19 virus?	231	95%
6	How much safe distance is required when an infected person coughs, sneezes, or speaks?	131	54%
7	Who are super spreaders of Covid 19 virus during epidemic peak?	226	93%
8	Which of the following is effective to clean your hands routinely?	226	93%

This table shows that more than 90 % students have accurate

knowledge about Covid 19 during second wave. We found that Students voluntarily participating in this study were mostly from first year (148), but 2<sup>nd</sup> year, 3<sup>rd</sup> year, final year and interns also voluntarily participated. We had found that most of the students had very good knowledge acquired from the electronic media and news channel

**Table no.3 Questionnaire of attitude of medical students**

Sr. no.	Questions	Response of students				
		Strongly disagree	disagree	neutral	agree	Strongly agree
1	Lockdown of major cities will help India to control the COVID-19 virus?	15	12	41	124	52
2	I am feeling angry or frustrated because of COVID-19 news on news channel	15	25	85	78	41
3	I feel scared and helpless because of COVID-19 complication like mucor mycosis	10	52	67	101	15
4	I feel hopeful about the future as many vaccines are now available.	5	4	33	129	71
5	"Janta Curfew" will help India to win the battle against the COVID-19 virus?	7	24	65	110	37

This table shows almost 50% students have positive attitude and they had optimistic view about preventive measure taken by government and health authority and vaccines.

**Table no. 4 Questionnaire of practice among medical students**

Sr. no.	Questions	Response of medical students		
		Yes	No	Neutral
1	Have you tested for COVID-19 if it was available to you?	169	23	50
2	Have you visited gatherings or public spaces recently?	32	203	8
3	Do you wear double masks when you go outside your home?	159	67	16
4	If a COVID-19 vaccine was available, would you get one immediately?	232	5	6
5	Do you carry hand sanitizer with you during the Covid outbreak in India?	229	11	2
6	Do you maintain social distance during the outbreak?	225	5	12
7	Did you avoid unnecessary travel or outing during the outbreak?	232	2	9

This tables show around 90% students had achieved accurate knowledge about disease pattern and spread of disease from health education programs by government and electronic media during lock down and showed good practice for prevention of Covid 19 disease spread. They had achieved health consciousness and positive attitude and good practice about Covid 19 epidemic.

## DISCUSSION

Covid 19 is highly infectious and rapidly spreading disease. Control measures are affected by knowledge, attitude and practice of people towards Covid 19. We found that 57% female students participated in our study and they are found more health conscious and had good practice which they had achieved because of good knowledge from different sources .our findings are similar to Sonam maheshwari<sup>1</sup> and others cross sectional study at GMC dehradun India. We had found that during lockdown period students had achieved accurate knowledge about disease pattern and spread of disease from health education programs by government and electronic media. Second and third year students because of university examination are not shown interest. Our study was conducted online during second wave of epidemic of Covid 19 similar to study conducted by Bao-Liang Zhong<sup>2</sup> and others at mental health center Wuhan china during rapid rise period of the outbreak. We also found that updated knowledge achieved by medical students from different sources had directly affected both attitudes and practices which were similar to findings of Minjung Lee<sup>3</sup> and others from South Korea. Wearing facial masks, practicing hand hygiene, and avoiding crowded places was effectively practiced by students. We agree with Minjung Lee about knowledge is an essential predictor of attitudes and behaviors

We agree that health conscious ness and adherence to the recommendations by government authority had major role in managing the second wave and students are found hopeful for vaccine effectiveness and play important to achieve low risk practices among medical students like Hayder Hasan<sup>4</sup> and others from University of Sharjah UAE. Our students also had shown similar findings like University students. Our students had demonstrated sound knowledge, and possessed optimistic attitudes and low-risk practices toward prevention of COVID-19.

In this study we had assessed student's knowledge about Covid 19, common symptoms and new symptoms, pattern of transmission and effective preventive measures and found similar findings like Ruwaa Alawia<sup>5</sup> and others from Al-Quds University, Jerusalem, and Palestine. We surely agree with them that updated knowledge is critical in students' future practices and attitudes towards COVID-19 patients. Telemedicine found to be one of the effective solutions to see patients and maintain physical distancing, lockdown, and home isolation as measures of infection transmission prevention. we had found that fear of transmitting the infection to family and friends was also mentioned by students in this study .

We had conducted online study during second wave of Corona 19 epidemic. Motivation by government authority and health sector had helped Students have updated knowledge about corona virus transmission, effective ways to prevent infections, understanding about all symptoms of Corona correctly and also they found hopeful for vaccines, these findings are contrary to the finding found Abdulra of Thamir Alqrache<sup>6</sup> and others from Cairo University, Cairo, Egypt. In our study most of the students participants (93%) were aware of nature of the disease and cause of disease and source of transmission of the disease which is less than findings (97.8%) by Hasanain Faisal Ghaziand<sup>7</sup> others using internet-based method in data collection due movement restriction and curfew imposed by Iraqi government. In our study we found

that 72% of students able to tell correct incubation period of Covid 19. These findings are found to be similar to Hasanain Faisal Ghazi and<sup>7</sup> others (75%) were able to tell about the true incubation period of COVID-19.

## CONCLUSION

During second wave of Covid 19 there was universal need for updated knowledge from trusted source, optimistic attitude and healthy preventive practices for public. Students voluntarily participating in this study were mostly from first year (148) and 57% female students participated in our study. This shows that most of the educated public will also achieve same knowledge, attitude and practice and able to control the spread of Covid 19

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