



Assessment of Knowledge, Attitude and Practice towards Corona Virus Disease 2019 among Final Year Dental Students in Post Lockdown Period: an Online Questionnaire Based Study.

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Abstract: *Background: The corona virus disease 2019- COVID-19 is a viral disease that is highly infectious and has claimed many lives till date and is still continuing to consume lives. Literature supports the view that good KAP level is connected with good management of the health practices. Hence in this study we evaluated the knowledge, attitudes, and practices (KAP) towards COVID-19 among final year dental students.*

Methods: A prospective, web-based, cross-sectional study was done among 100 final year dental students during October 2020 by a questionnaire using Google forms. $p < 0.05$ was considered significant. Results: On the whole, the students' knowledge concerning COVID-19 was acceptable they have positive attitude and they trailed healthy preventive practices. No significant difference were found among sexes in knowledge and practice though attitude score was prompted by gender. Conclusions: Maximum dental undergraduates had adequate knowledge levels, positive attitude towards COVID-19 and practices. Nevertheless there are some inconsistencies in the opinions of COVID-19. Sufficient training and counseling dental students through organized teaching techniques may help in aiding the public in the need of hour.

Keywords-*KAP study, Survey, COVID-19*

I. INTRODUCTION

The corona virus disease 2019- COVID-19 is a viral disease that is highly infectious and has claimed many lives till date and is still continuing to consume lives. (1) It is assumed to be affecting the respiratory system, and may lead to the cascade of events and eventual death in few. (2). Due to its high infectivity and

mortality index its treatment and prognosis is evolving. (3) After the registration of the first case, and for the prevention of further spread of the pandemic India announced the lockdown on March 21, 2020. (4, 5) In spite of the lock down there has been a surge in the cases. This has led to a massive burden on the health system in India as well as other countries. Various preventive measures were put out by WHO and many online training programs were given to the health care workers to effectively prevent the spread and educate. (6) There is literature supporting the view that good KAP level is connected with good management of the health practices. (7) Hence in this study we evaluated the knowledge, attitudes, and practices (KAP) towards COVID-19 among final year dental students.

II. MATERIAL AND METHODS

We conducted a Cross sectional study among 100 final year dental students of batch 2020 during October 2020. After taking the consent, questionnaire was given to the participants that was prepared from the previous questionnaire studies and noted using Google Forms. (8-10) The study comprised of 4 sections with questions of the participants demographics, attitude, knowledge and practice. The scores were given as 1 point for yes/ true answer and for no/ false/I don't know answers given 0 point. Later statistical analysis was done after the data was collected and $p < 0.05$ was taken as significant.

III. RESULTS

In the present study the majority participants were men. Similar distribution of age was seen among both the genders. (TABLE 1)

Most of the members had right information about the manifestations of COVID-19. Besides, majority of the members knew that early treatment can assist most patients with recuperating the disease. The vast majority of the members realized that not all people with COVID-19 progress to serious conditions. 80% of the members were of the assessment that children are at risk. 35% members considered pregnancy as one of the risk factor in COVID-19. Most of the students had right information about the transmission courses of the virus. Just 75% members concurred that public can wear medical masks to forestall the disease. 80% members accepted that COVID-19 can be easily transmitted in the humid regions. Awareness about the anticipation and treatment was high among the members, as majority agreed that COVID-19 spreads in mass gatherings. Moreover, 97% of members understood that positive individuals need isolation and the contacts need quarantine for 2 weeks. (TABLE 2)

In the present study 92% concurred that media provides the updates on the COVID-19 virus. Only half of the participants agreed that "Janta Curfew" prevented the viral spread. 81% thought lockdown the key cities helped prevent spread. Only a third accepted that COVID-19 will be effectively controlled while 65% members didn't know. The vast majority of the members felt that travelling had not assisted India with controlling COVID-19. 72% of the members upheld utilizing Aarogyasetu application to monitor COVID-19 updates. (TABLE 3)

Practically all members acknowledged that during COVID-19 episode they expanded the rate of washing hands. Likewise, a high level of members utilized hand sanitizer, washed their hands, kept a mask, and used tissue during sneezing. Keeping up social distance was the second most common conduct revealed by the members. A high level of the members maintained a strategic distance from unnecessary travel and avoided gatherings. 84% of the participants favored readymade sanitizer over hand crafted one while 15% members utilized homemade sanitizer. 62% members put away helpline number to contact if there should be an occurrence of COVID-19 illness suspicion. 26% members felt that hot baths prevented the infection. Majority accepted that alcohol had no effect on infection control (TABLE 4)

In the present study no significant knowledge difference was seen between men and women. ($P > 0.05$). Women had significant higher attitude levels than men. In addition, the difference in attitude score was significant ($P < 0.05$). Though higher Practice score was seen among men slightly it was not significant ($P > 0.05$).

In the comparison among the ages knowledge was equally distributed in the 2 age groups. Higher attitude was seen in < 20 age group, Practice score among > 20 age group though the difference was not significant ($P > 0.05$). (TABLE 5)

IV. FIGURES AND TABLES

TABLE 1: Distribution of age/ sex among the participants

Age	Sex		%
	Female	Male	
17-20	21	30	51
>21	16	33	49
TOTAL	37	63	100

TABLE 2: The findings of the knowledge questionnaire

The Queries	True	False	don't know
1. Clinical symptoms include fatigue, fever, dry cough & myalgia.	97	2	1
2. Only symptomatic treatment is given for the disease.	98	1	1
3. Only in few the disease is fatal	93	5	2
4. Consuming animals may not lead to COVID.	56	24	20
5. Asymptomatic patients can also transmit.	92	5	3
6. COVID-19 virus is airborne.	95	2	3
7. Everyone can wear the medical masks	75	15	10
8. Children and infants are at risk	80	18	2
9. Mass gatherings are to be avoided to prevent spread	98	1	1
10. Isolation of the positive patients is advised	97	2	1
11. Two week quarantine is advised	97	2	1
12. Pregnancy is seen as risk factor in Covid 19	35	33	32
13. the clinical syndrome in COVID-19 infection is Severe pneumonia	81	8	11
14. COVID-19 can spread through non-vegetarian food	9	76	15
15. COVID 19 virus can not be transmitted in hot and humid regions.	8	80	12
16. vaccines against pneumonia may treat COVID	2	74	24
17. Tab HYDROXYCHLOROQUINE is advised for COVID	32	45	23

TABLE 3: The findings of the attitude questionnaire

The Queries	True	False	Don't know
1. Does mass Media provide the updates of COVID-19 virus?	92	5	3
2. Has "Janta Curfew" prevented the spread?	55	37	11
3. Has the Lockdown of key cities in progress of the spread?	81	16	3
4. Can the COVID-19 virus be controlled?	35	25	40
5. Unnecessary travelling during the outbreak has helped india to control COVID-19.	22	76	2
6. Was the Aarogyasetu app effective in tracking the cases of COVID?	72	15	13

TABLE 4: The findings of the practice questionnaire

Questions	Yes	No
1. Did the frequency of washing hands increased post COVID?	98	2
2. Did hand sanitizer usage increased after COVID?	97	3
3. Have you started using mask more often ?	98	2
4. Are you applying hand sanitizer after COVID in India?	94	6
5. Have you stored the helpline number in case of to contact?	62	38
6. Did you maintain social distance?	95	5
7. Did you cover cough and sneeze?	98	2
8. Did you avoid unnecessary travel during the outbreak?	98	2
9. Did you avoid mass gatherings during the outbreak?	97	3
10. Did you use homemade sanitizer over readymade?	16	84
11. Do you think Taking Hot bath can prevent COVID-19 disease?	26	74
12. Do you think Drinking alcohol can prevent COVID-19?	12	88

TABLE 5: Evaluation of Knowledge, attitude and practice score among the ages and sexes

Variables	Knowledge		Attitude			Practice			
	Mean+SD	t value	P value	Mean+SD	t value	P value	Mean+SD	t value	P value
Gender									
Male	13.77+1.88	0.151	0.881	3.23+1.531	2.361	0.021	10.07+1.01	1.061	0.291
Female	13.74+1.91			3.90+1.131			10.28+0.81		
Age									
<20	13.791+1.851	0.181	0.861	3.661+1.431	1.201	0.231	10.131+0.81	0.201	0.851
>20	13.721+1.951			3.321+1.401			10.171+1.01		

V. DISCUSSION

In the current study, the knowledge, attitude, and practice of the final year dental students of towards COVID-19 were surveyed. We found that, during the COVID-19 pandemic, majority (95%) of the members had broad knowledge of COVID-19. 98% of the pupils agreed a symptomatic treatment for from the COVID-19 was enough. Various treatment modalities have been suggested in the studies of Chen et al., Wang et al., and Stebbing et al., like antivirals and immunoglobulins (11-13). It is notable that one third thought Hydroxychloroquine can't prevent the disease (31%).

In the current examination no critical distinction was found in mean knowledge scores among the ages or the sexes. However attitude was different between the sexes. Practice score was higher among men. This observation is in accordance with the study of Maheshwari S et al. (10) In our study we found that sufficient COVID-19 knowledge scores, positive attitude, and adequate practice were found among the undergraduates. Only two variables were assessed in the present study gender and age. Further studies with various other variables is suggested. Our investigation shows that the outcomes are positive towards KAP. However, this examination was performed among dental understudies and not overall public. From our study it can be suggested that hand hygiene is to be followed and unnecessary gatherings/ travel be avoided. With the participation of all the disease can be prevented.

VI. CONCLUSION

Maximum dental undergraduates had adequate knowledge levels, positive attitude towards COVID-19 and practices. Nevertheless there are some inconsistencies in the opinions of COVID- 19. Sufficient training and counseling dental students through organized teaching techniques may help in aiding the public in the need of hour.

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