Nat. Volatiles & Essent. Oils, 2021; 8(5): 6365 - 6377

Knowledge, Attitude And Practice Of Dental Students Towards Covid 19.

Hiranya S [1] , Akshay Khandelwal [2]

1 Department of Conservative Dentistry,
Saveetha Dental College,
Saveetha Institute of Medical and Technical Sciences(SIMATS),
Saveetha University,
Chennai-600077
Email I'd: 151901097.sdc@saveetha.com

2 Department of Conservative Dentistry,
Saveetha Dental College,
Saveetha Institute of Medical and Technical Sciences(SIMATS),
Saveetha University,
Chennai-600077
Email I'd: akshayk.sdc@saveetha.com

ABSTRACT:

INTRODUCTION: The 21st century has seen the development and reappearance of different exceptionally infectious diseases like extreme intense respiratory disorder (SARS), center east respiratory condition, H1N1 flu, the Ebola, and at present the COVID-19 outbreak.

MATERIALS AND METHODS: This was a prospective observational study .The advantages of the study were economical,easy to create,wide reach,gathers large data,quick interpretation.The questions were circulated to the age group of 18 to 24 years and circulated among 100 undergraduate college students.The sampling method used in our study was simple random sampling .A statistical test was done using a software SPSS. Statistical tests used descriptive analysis and frequency percentage. The method is representative of each output variable pie chart. The association between groups was assessed by Chi Square test where $p < 0.05$ was considered statistically significant.

RESULTS: On analyzing the data using spss , 57% were male and 47% were female. 46% felt fever is the symptom of covid 19 , 16% felt fatigue is the symptom of covid 19 , 7% felt myalgia is symptoms of covid 19 and 31% felt all the options were right.

CONCLUSION: This study concludes that the students have adequate knowledge and awareness on covid 19. Furthermore studies can be done with more sample size. Programmes can be conducted to create more awareness.

KEYWORDS: Covid,dental professionals,pandemic,innovative technology,eco friendly

INTRODUCTION:

The 21st century has seen the development and reappearance of different exceptionally infectious diseases like extreme intense respiratory disorder (SARS), center east respiratory condition, H1N1 flu, the Ebola, and at present the COVID-19 outbreak (1).Known to be brought about by the SARS-COV-2, COVID-19 is the third human Covid pandemic after the SARS in 2002, and center east respiratory condition in 2009. It has a lot quicker spread than the two other coronaviruses(2). It might communicate through direct contact, i.e., inward breath of drops created during hacking or wheezing of a tainted individual and

through roundabout contact by contacting the surfaces (and thusly our oral, nasal or conjunctival mucosa) contaminated by drops or body liquids from a contaminated person (2,3).

This pandemic brought all elective clinical medical services to a stop, particularly the therapies which include vaporized producing systems. The oral medical care area has arisen to be one of the most exceedingly terrible hit, as practically all dental techniques include vaporized generation(4) Dental methodology aerosolized salivation and may prompt airborne pollution as the oral pit harbors microorganisms and infections from the nose, throat, and respiratory tract.(5) Even a straightforward noninvasive intra-oral assessment ensnares the danger of airborne diseases attributable to the vicinity to the patient's open mouth and breathing space. The current flare-up has constrained dental specialists everywhere in the world to concede all medicines with the exception of earnest consideration, leaving numerous patients in much distress as well as the dental specialists in a monetary crunch(6). There is an inclination of misgiving and dread in both the dental specialist and the patient in regards to post-COVID-19 dental consideration. Preventive estimates, for example, social removal, hand cleanliness, sanitization, and right utilization of individual defensive gear (PPE) are pivotal for forestalling transmission in any medical care arrangement. Not withstanding, it will add to the treatment cost and time.

Dental treatment conveys the danger of cross-disease from contamination causing microbes between the patient and the oral medical care supplier. The age of splatter and pressurized canned products during dental methodology and vicinity among patient and wellbeing laborer represent a danger of airborne respiratory infections(6,7) Similarly, treatment of sharps and contact with the patient's blood and salivation can send blood/spit borne diseases. Considering the danger of airborne transmission of SARS CoV-2 through vaporizers, the danger of cross-contamination through dental treatment is conceivably high. Despite the fact that reviews have been directed with respect to cross-contamination and disease control in dental centers among dental specialists and dental students,10 not very many have assessed this information among the patients.

Scarcely any new examinations have assessed the information, demeanor, and practices of the populace in regards to the COVID-19 episode among Chinese and Iranian population(8).Our team has extensive knowledge and research experience that has translate into high quality publications(10–19),(20–23),(24–28)(29).The current investigation aims to evaluate the knowledge, attitude of dental students on covid 19.

MATERIALS AND METHODS:

This was a prospective observational study .The advantages of the study were economical,easy to create,wide reach,gathers large data,quick interpretation.The questions were circulated to the age group of 18 to 24 years and circulated among 100 undergraduate college students.The sampling method used in our study was simple random sampling .

The questionnaire was a self structured questionnaire administered through google forms to the participants.Each output variable was collected as ordinal data and the collected data were represented as pie charts.A statistical test was done using a software SPSS. Statistical test used descriptive analysis and frequency percentage. The list of output variables were demographic information,eating disorder,sleep patterns,stress management techniques.The method of representative of each output variable pie chart. The association between groups was assessed by Chi Square test where $p < 0.05$ was considered statistically significant.

RESULTS :

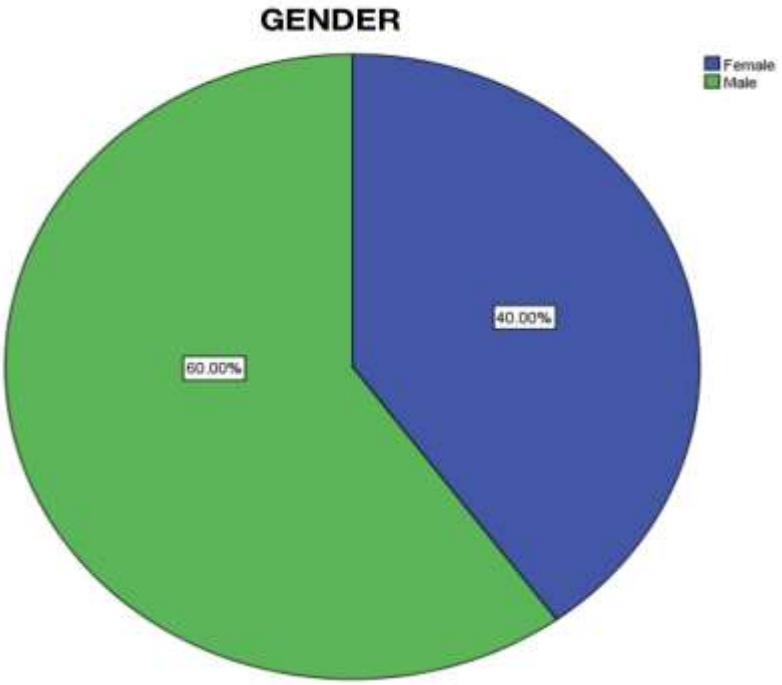

Figure 1: Pie Chart showing the percentage distribution of the gender of participants .60% participants were male (green) and 40% participants were female (blue)

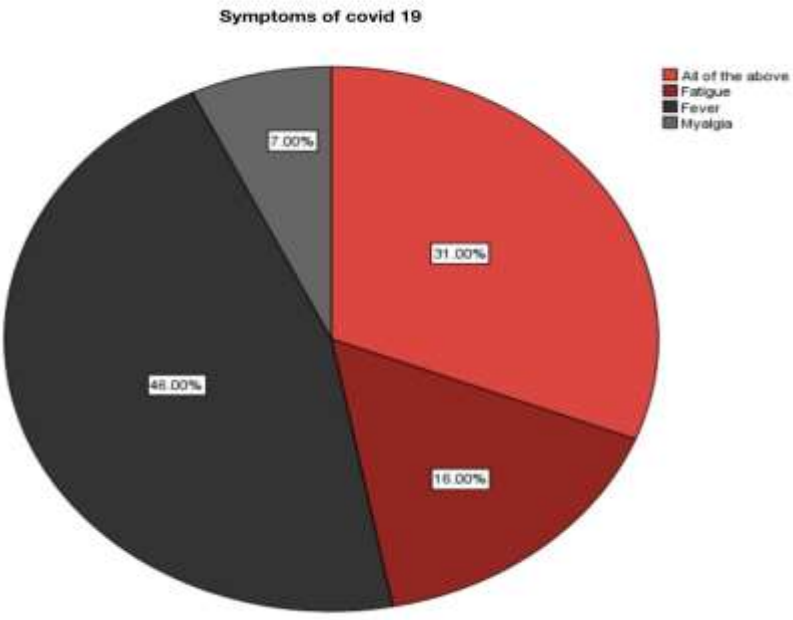

Figure 2: Pie Chart showing the percentage distribution of the participants who are aware of the symptoms of COVID 19. 46% felt fever is the symptom of covid 19 (black),16% felt fatigue is the symptom

of covid 19 (light red),7% felt myalgia is symptoms of covid 19 (dark grey) and 31% felt all the options were right (orange

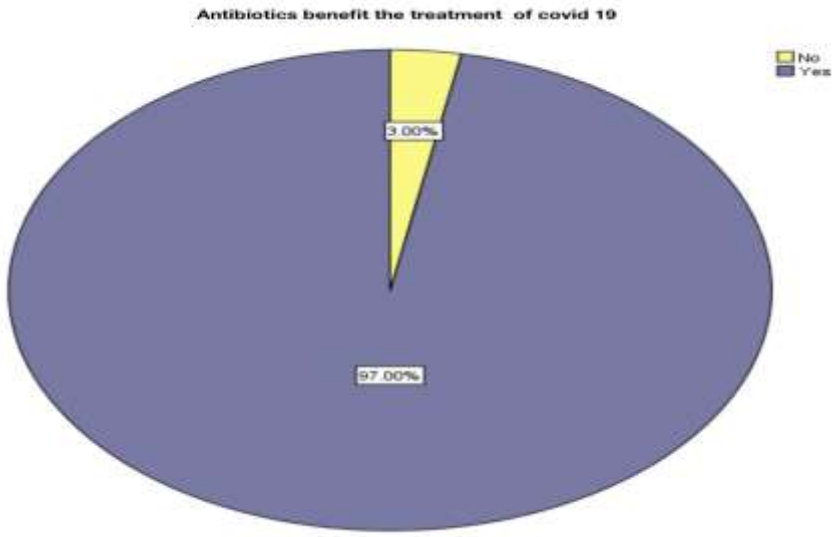

Figure 3: Pie Chart showing the percentage distribution on the perception that antibiotics benefit treatment for covid 19 . 97% felt that antibiotics benefit treatment for covid 19(blue) and 3% felt that antibiotics don't benefit treatment for covid 19(yellow)

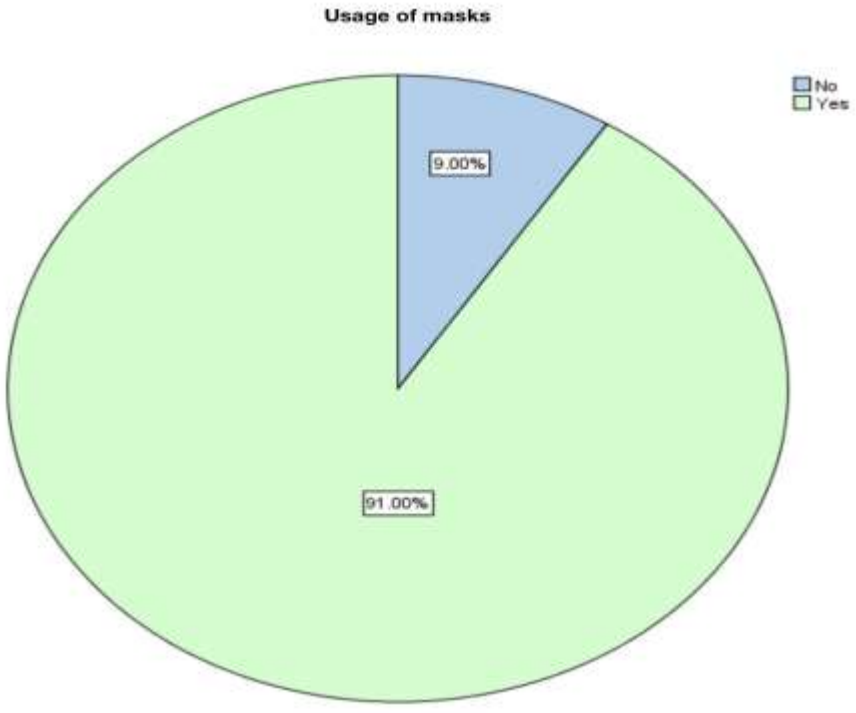

Figure 4 : Pie Chart showing the percentage distribution on the usage of masks . 91% started using masks (green) and 9% did not start using masks (blue)

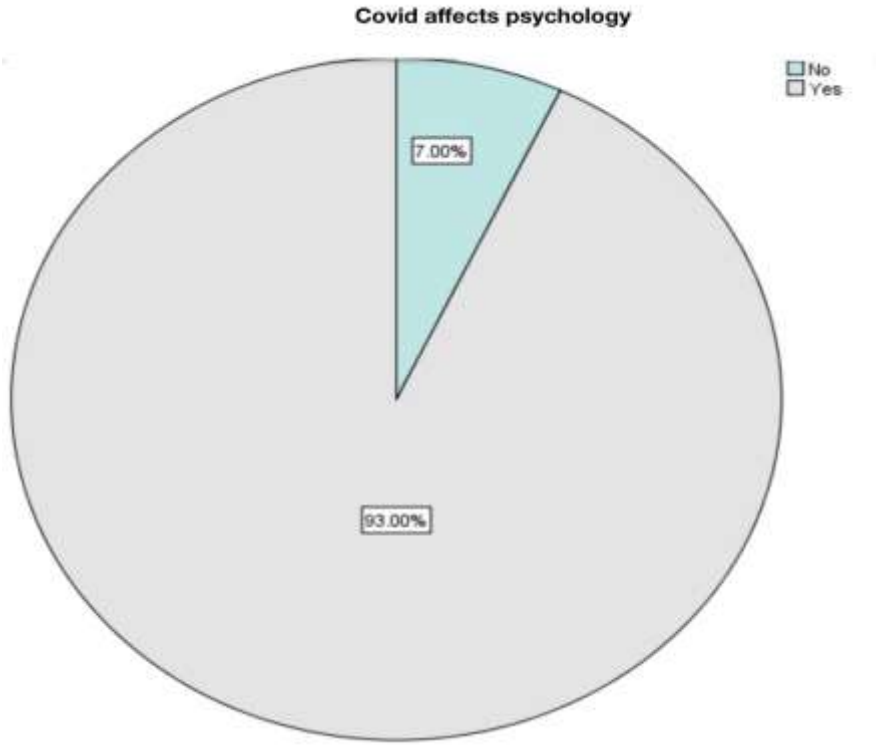

Figure 5: Pie Chart showing the percentage distribution on whether covid affects the psychology for covid 19 .93% felt covid affects the psychology (grey) and 7% felt covid does not affect the psychology(blue).

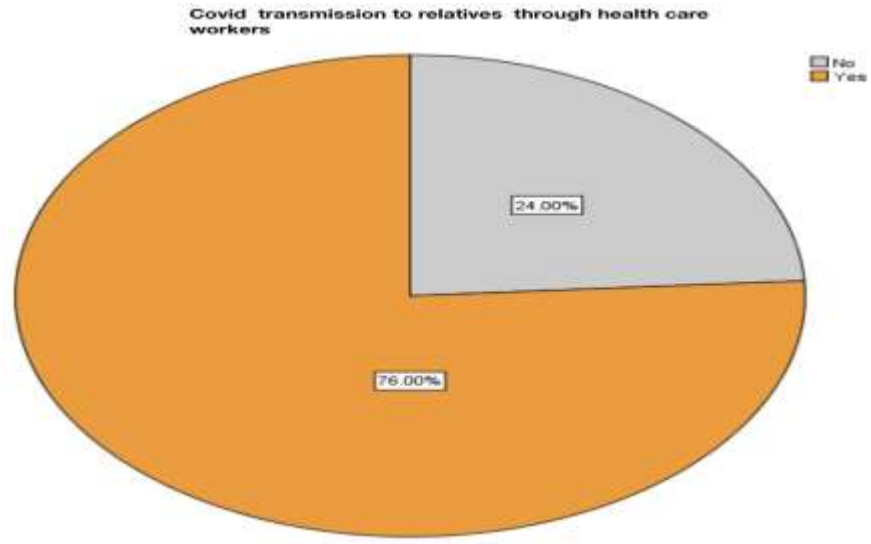

Figure 6 : Pie Chart showing the percentage distribution on whether they would infect any relatives or people around them in terms of COVID-19 . 76% felt they would infect any relatives or people around

them in terms of COVID-19 (orange) and 24% felt they would not infect any relatives or people around them in terms of COVID-19 (grey).

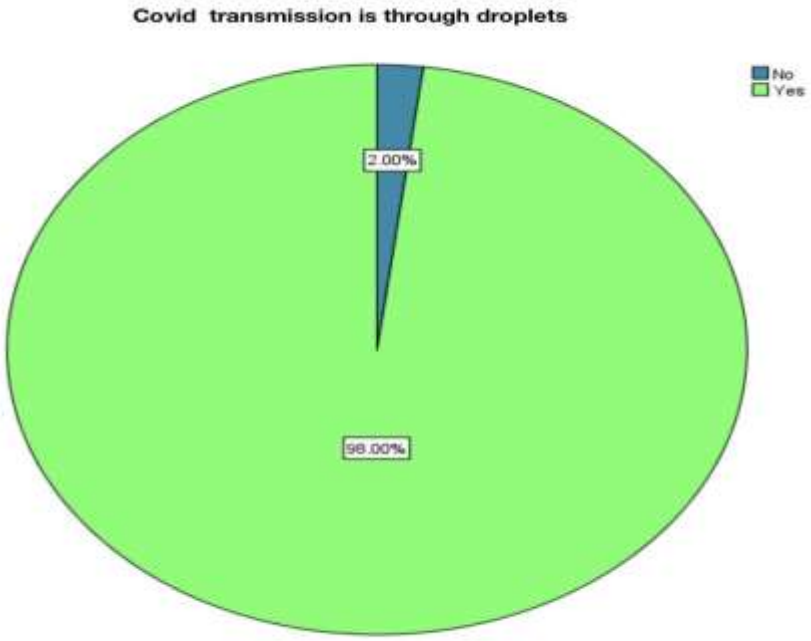

Figure 7 : Pie Chart showing the percentage distribution whether covid 19 is a droplet infection . 98% felt that covid 19 is a droplet infection (green) and 2% felt that covid is not a droplet infection (blue)

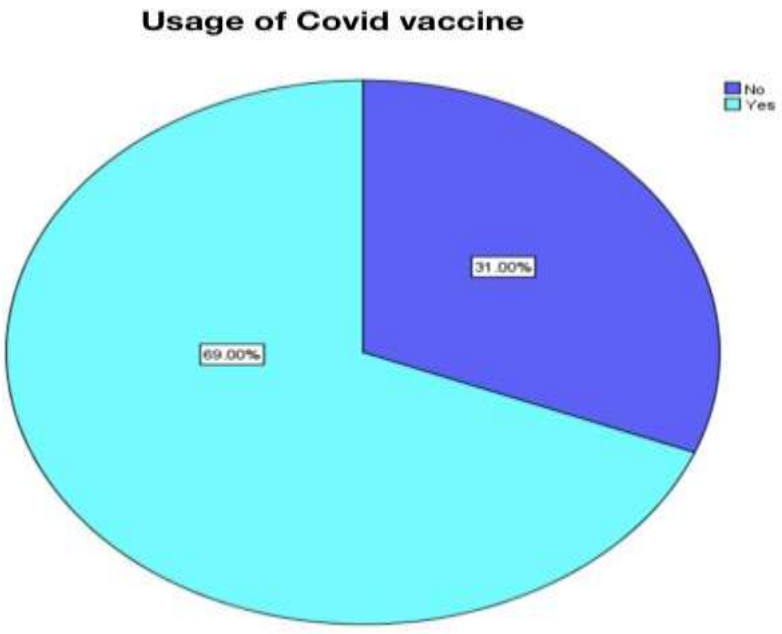

Figure 8 : Pie Chart showing the percentage distribution on usage of covid vaccine . 69% have taken the vaccine (light blue) and 31% have not taken the vaccine (dark blue).

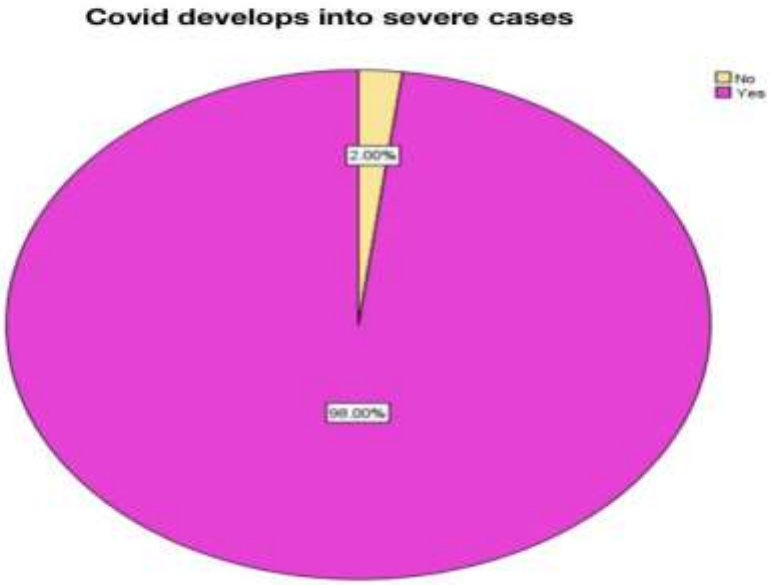

Figure 9 : Pie Chart showing the percentage distribution on covid can develop into severe cases . 98% felt that covid develops into severe cases (pink) and 2% felt that covid does not develops into severe cases (orange).

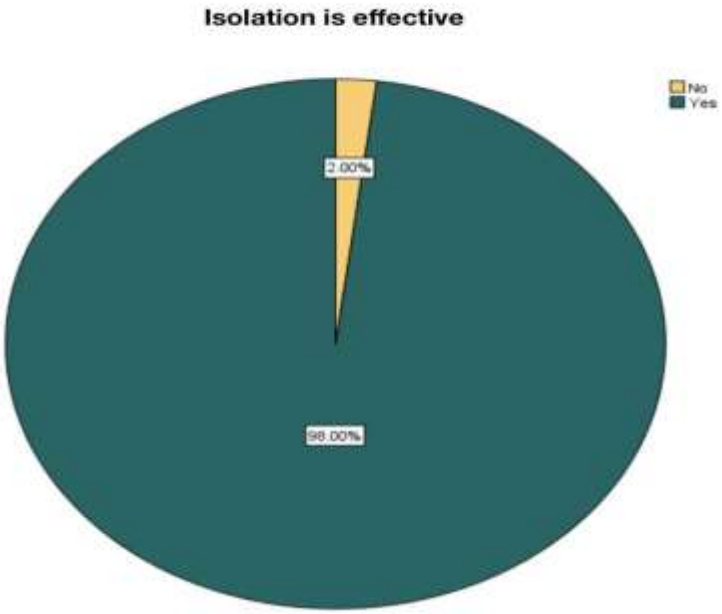

Figure 10 : Pie Chart showing the percentage distribution on perception isolation and treatment of people who are infected with covid 19 virus are effective ways to reduce the spread of virus . 98% felt that isolation and treatment of people who are infected with covid 19 virus are effective ways to reduce the spread of virus (dark green) and 2% felt isolation and treatment of people who are infected with covid 19 virus are not effective ways to reduce the spread of virus (yellow).

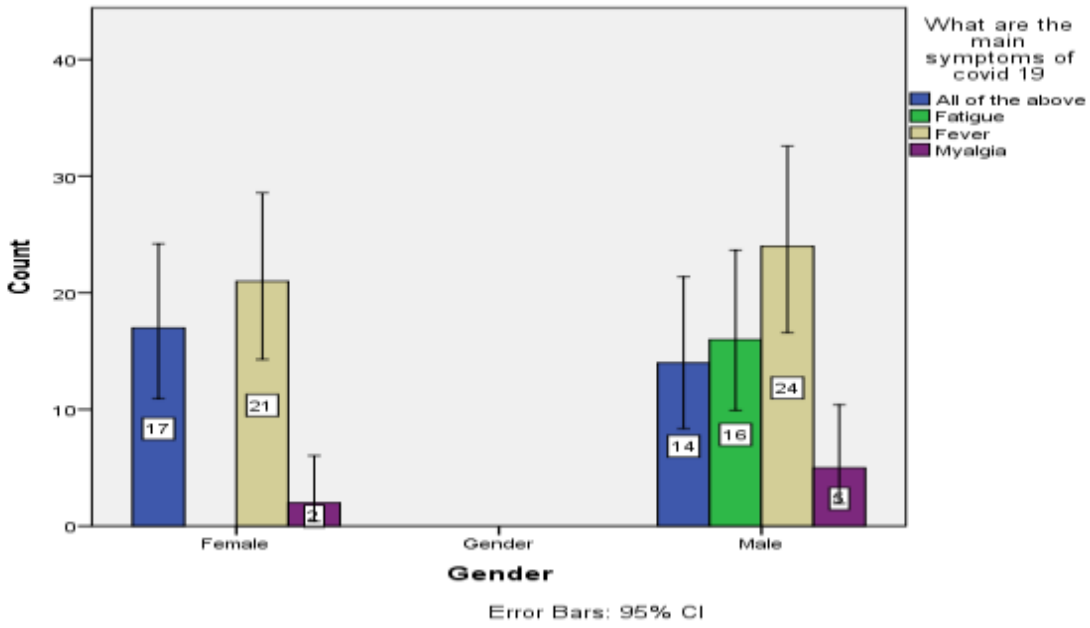

Figure 11:Bar graph showing the association of responses based on gender with the awareness about symptoms of covid . Beige stands for fever, green stands for fatigue,blue stands for all of the above and purple stands for myalgia .X axis represents gender and Y axis represents self awareness of symptoms of covid . Chi square test was done,p value :0.002 ($p < 0.05$) and was statistically significant.This shows males have more self awareness about covid than females.

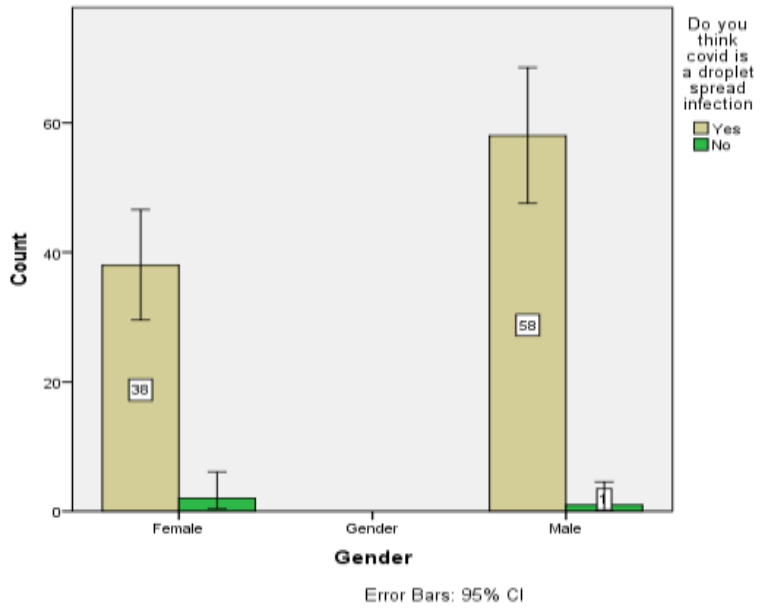

Figure 11:Bar graph showing the association of responses based on gender with perception that covid is a droplet infection.Green stands for yes and blue stands for no .X axis represents gender and Y axis represents perception that covid is a droplet infection . Chi square test was done,p value :0.002 (p <0.05) and was statistically significant.This shows males have more self awareness about covid than females.

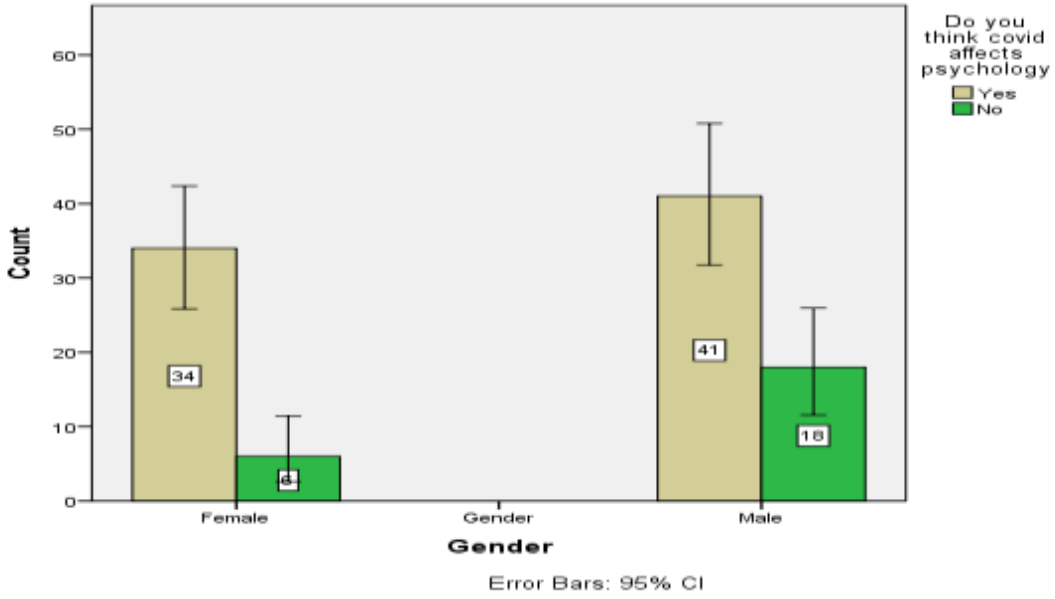

Figure 13:Bar graph showing the association of responses based on gender with the perception that covid affects psychology.Blue stands for no and green stands for yes.X axis represents gender and Y axis represents the perception that covid affects psychology . Chi square test was done,p value :0.002 (p <0.05) and was statistically significant.This shows males have more awareness about covid than females.

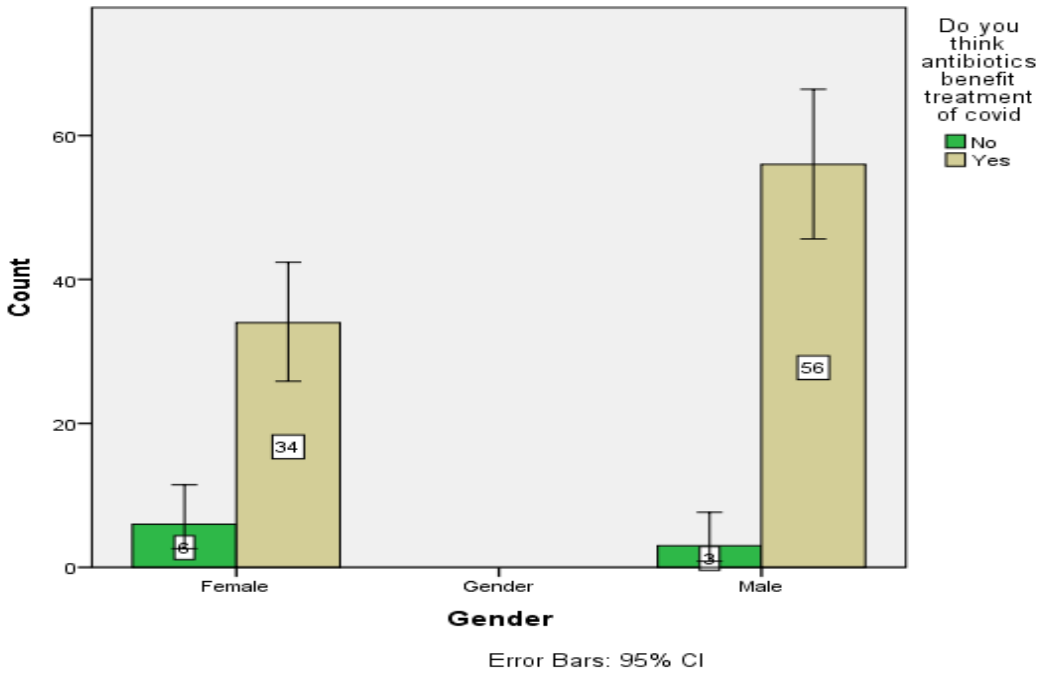

Figure 14:Bar graph showing the association of responses based on gender with the perception that antibiotics benefit the treatment of covid . green stands for yes blue stands for no .X axis represents gender and Y axis represents the perception that antibiotics benefit the treatment of covid . Chi square test was done,p value :0.002 (p <0.05) and was statistically significant.This shows males have more perception that antibiotics benefit the treatment of covid than females.

On analyzing the data using SPSS , 60% were male and 40% were female (Figure 1) . 46% felt fever is the symptom of covid 19 , 16% felt fatigue is the symptom of covid 19 , 7% felt myalgia is symptoms of covid 19 and 31% felt all the options were right (Figure 2). 97% felt that antibiotics benefit treatment for covid 19 and 3% felt that antibiotics don't benefit treatment for covid 19 (Figure 3). 93% started using masks and 7% did not start using masks (Figure 4).93% felt covid affects the psychology and 7% felt covid does not affect the psychology (Figure 5) .76% felt they would infect any relatives or people around them in terms of COVID-19 and 24% felt they would not infect any relatives or people around them in terms of COVID-19 (Figure 6) .98% felt that covid is a droplet infection and 2% felt that covid is not a droplet infection (Figure 7) . 69% have taken the vaccine and 31% have not taken the vaccine (Figure 8). 98% felt that covid develops into severe cases and 2% felt that covid does not develops into severe cases (Figure 9).98% felt that isolation and treatment of people who are infected with covid 19 virus are effective ways to reduce the spread of virus and 2% felt isolation and treatment of people who are infected with covid 19 virus are effective ways to reduce the spread of virus (Figure 10).

DISCUSSION:

Dental experts, dental understudies, and helper staff are at more threat of encountering microorganisms conveyed through blood or other body fluids than the common people (9).The best approach to lessening and preventing pollution of various microorganisms is demanding adherence to tainting control methods. Subsequently, the data about and attitudes towards overwhelming diseases of understudies who have started lenient treatment techniques in the office are indispensable. Less experienced understudies are

presumably going to be more powerless to the threat of pollution illnesses (10).There are various assessments investigating the data levels and viewpoints of dental understudies about compelling ailments (9,11,12) .Covid is another affliction that has spread rapidly and about which information is limited. Taking everything into account, no assessment has yet been made related to COVID-19 and dental understudies.

In previous study showed that 80 % answered that antibiotics are not beneficial for covid treatment and in present study 91% felt antibiotics are beneficial(13).The present study 76% felt covid affects the psychology.Previous study conducted at a medical school in China, it was shown that the psychological status of male and female students were equally affected by the COVID-19 outbreak .98% responded that they wore a mask, in our study 93% wore a mask(14).Covid transmission courses are through direct contact and airborne dots, including disintegrated transport (15). By far most of the prescriptions in dentistry produce drops and also vaporizers that can cause illness. The limitations of the study is that the study is limited within the institution . In future a large number of population .Programmes can be conducted to create more awareness .

CONCLUSION:

This study evaluates the knowledge , attitude and practice of covid 19 among dental students .In this study , the students have adequate knowledge and awareness on covid 19 .Furthermore studies can be done with more sample size .Programmes can be conducted to create more awareness.

ACKNOWLEDGMENT:

We thank Saveetha Dental College for supporting us to conduct the study.

CONFLICT OF INTEREST:

Nil

SOURCE OF FUNDING:

- Saveetha Dental College
- SIMATS,Saveetha University\
- NewHitech Homemakers

REFERENCES:

1. Taghrir MH, Borazjani R, Shiraly R. COVID-19 and Iranian Medical Students; A Survey on Their Related-Knowledge, Preventive Behaviors and Risk Perception [Internet]. Vol. 23, Archives of Iranian Medicine. 2020. p. 249–54. Available from: http://dx.doi.org/10.34172/aim.2020.06

2. Soltan EM, El-Zoghby SM, Salama HM. Knowledge, Risk Perception, and Preventive Behaviors Related to COVID-19 Pandemic Among Undergraduate Medical Students in Egypt [Internet]. Vol. 2, SN Comprehensive Clinical Medicine. 2020. p. 2568–75. Available from: http://dx.doi.org/10.1007/s42399-020-00640-2

3. Ullah R, Ong SS. COVID-19 and Medical Students [Internet]. Vol. 23, Archives of Iranian Medicine. 2020. p. 722–3. Available from: http://dx.doi.org/10.34172/aim.2020.94

4. Askarian M, Groot G, Taherifard E, Taherifard E, Akbarialiabad H, Borazjani R, et al. Basics of Developing a COVID-19 Reopening Roadmap: A Systematic Scoping Review [Internet]. Iranian Journal of Public Health. 2021. Available from: http://dx.doi.org/10.18502/ijph.v50i2.5336

5. Zareie B, Roshani A, Mansournia MA, Rasouli MA, Moradi G. A Model for COVID-19 Prediction in Iran Based on China Parameters [Internet]. Vol. 23, Archives of Iranian Medicine. 2020. p. 244–8. Available from: http://dx.doi.org/10.34172/aim.2020.05

6. Taghrir M. Review of "Medical Student Mobilization During A Crisis: Lessons From A COVID-19 Medical Student Response Team" [Internet]. 2020. Available from: http://dx.doi.org/10.14322/publons.r7874644

7. Tabrizi A, Afshar A. The COVID-19 Outbreak: An Experience for Iranian Health Systems and Orthopedics Association [Internet]. Vol. 23, Archives of Iranian Medicine. 2020. p. 570–1. Available from: http://dx.doi.org/10.34172/aim.2020.63

8. Raeisi A, Tabrizi JS, Gouya MM. IR of Iran National Mobilization against COVID-19 Epidemic [Internet]. Vol. 23, Archives of Iranian Medicine. 2020. p. 216–9. Available from: http://dx.doi.org/10.34172/aim.2020.01

9. Al-Shamiri HM, Alaizari NA, Al-Maweri SA, Tarakji B. Knowledge and attitude of dental trauma among dental students in Saudi Arabia [Internet]. Vol. 09, European Journal of Dentistry. 2015. p. 518–22. Available from: http://dx.doi.org/10.4103/1305-7456.172636

10. Singh A, Purohit B. Knowledge, Attitude and Practice towards Infection Control Measures and it's Correlation among Dental Students in Bhopal city, Central India [Internet]. Vol. 7, International Journal of Infection Control. 2011. Available from: http://dx.doi.org/10.3396/ijic.v7i1.007.11

11. Al-Shamiri H-M, AlShalawi F-E, AlJumah T-M, AlHarthi M-M, AlAli E-M, AlHarthi H-M. Knowledge, Attitude and Practice of Hepatitis B Virus Infection among Dental Students and Interns in Saudi Arabia. J Clin Exp Dent. 2018 Jan;10(1):e54–60.

12. Alhedyan FS, Alqhtani N, Alharbi AR, Alasimi KS, Alomran AI, Aldibas AO, et al. Knowledge and Attitude of Dental Students and Interns in Saudi Arabia (Riyadh Region) among Hepatitis C Virus Infection [Internet]. Journal of Pharmaceutical Research International. 2021. p. 13–26. Available from: http://dx.doi.org/10.9734/jpri/2021/v33i331155

13. Ataş O, Yildirim TT. Evaluation of knowledge, attitudes, and clinical education of dental students about COVID-19 pandemic [Internet]. Vol. 8, PeerJ. 2020. p. e9575. Available from: http://dx.doi.org/10.7717/peerj.9575

14. Bains R, Tikku AP, Bains VK, Verma P. Knowledge, Attitudes, and Practices of Dental Patients Toward Cross-Infection and Economic Implications in View of Covid-19: An Online Survey [Internet]. Vol. 12, Journal of Advanced Oral Research. 2021. p. 95–102. Available from: http://dx.doi.org/10.1177/2320206820972250

15. Ge Z-Y, Yang L-M, Xia J-J, Fu X-H, Zhang Y-Z. Possible aerosol transmission of COVID-19 and special precautions in dentistry. J Zhejiang Univ Sci B. 2020 May;21(5):361–8.