International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 02, 2020
ISSN: 1475-7192

EFFECT OF INTERNET DEPENDENCY ON THE STUDY SKILLS OF THE UNDERGRADUATE DENTAL STUDENTS

R. Swetha[1], Dr. L. Keerthi Sasanka[2], Dr. Dinesh Premavathy[3]

Abstract

Aim*: To analyse the effect of internet dependency on the study skills of the undergraduate dental students.*

Methods and Materials*: An online survey among 100 undergraduate dental students was conducted to analyse the internet usage and its dependency on study skills. Self-administered questionnaires (set of 10) were circulated through WhatsApp platform. The study was carried out from May 2020 to June 2020. The participants were explained about the purpose of the study in detail. They were advised to read the questions carefully and then begin to fill the survey. The data were validated and verified. Feedback and corrections from the participants were taken into account. The results were statistically analysed*

Results*: On analysing the data 34% of the students spent more than 5 hours on the internet, 56% preferred the internet over book for studying, 62% of the participants preferred internet to find solutions quicker; majority of the participants, i.e. 62% accepted that their academic performance would improve with the help of internet, 65% of the participants felt that the internet was beneficial during lockdown, 43% agreed that internet helped during the lockdown in attending virtual classes, for 31% it helped to stay in touch with the course, for 26% of the participants it helped in conducting surveys and doing research.*

Conclusion*: There are several benefits of the internet. The students should be trained to improve their strategic browsing which can help broaden their internet usage. There are both positive and negative sides of using the internet. Balanced use of the internet among the students would help them in scoring more marks thus better academic performance.*

Keywords: *Dental students; Internet; Study skills*

Introduction

Information technology revolution of the present era is mainly dependent upon the internet. It has permeated into our lives to such an extent that life without the internet would look meaningless. Every walk of life, education, research, business, military etc and even day to day activities are heavily dependent on the internet [1]. The Internet can be used for vast educational benefits. For example, students can improve their studies by gaining access to the latest information and material available online, and can also establish worldwide educational and academic links. On the other hand, misuse of the Internet often leads to unhealthy

[1] Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai, Email: 151901024.sdc@saveetha.com
[2]Corresponding Author, Senior Lecturer, Department of Prosthodontics, Saveetha Dental College and Hospitals, Saveetha Institute of Medical And Technical Science, Saveetha University, Email: Keerthis.Sdc@Saveetha.Com
[3] Senior Lecturer, Department of Anatomy, Saveetha Dental College and Hospitals, Saveetha Institute of Medical And Technical Sciences, Saveetha University, Email: dineshp.sdc@Saveetha.Com

while heavy Internet use leaves less time for anything else [2]. In a study by Kadli revealed that among several motivating factors for using the Internet, students strongly claimed that project work, quick and reliable communication, and the availability of updated information were motivating factors. Internet using skills were acquired by the majority of students by self-study and what they learnt through their colleagues[3]. Medical students can learn about the latest information related to diseases and infections [4][5]. There are studies which focus on school students and among students pursuing higher education. There aren't many studies which focus on specific fields such as the medical field, dentistry etc. The present study focuses on the effect of internet dependency on the study skills of the undergraduate dental students. There are several studies done by the students in our department but the current study is first of its kind [6,7].

MATERIALS AND METHODS

An online survey among 100 people was conducted to analyse the internet usage and its dependency among undergraduate dental students. The approval for conducting the survey was given by the esteemed institutional research department via SRB. The study was carried out from May 2020 to June 2020. Self-administered questionnaires (set of 10) were circulated. The participants were advised to read the questions thoroughly and then begin to answer the questions.

The data were validated and verified.Feedback and corrections from the participants were taken into account. The results were statistically analysed [6,8,9][10][11]

RESULTS AND DISCUSSION

On analysing the survey response, 31% of the students were from first year, 51% were second year, 7% were third year. 34% of the participants spent over 5 hours on the internet, 26% spent 4 to 5 hours, 22% spent 2 to 3 hours, and 18% spent 3 to 4 hours. 56% of the participants preferred the internet over books for studying. 55% referred to class notes and 45% checked the internet to clear doubts. Majority of the students i.e. 68% of the students felt that the internet was a better source of information. 32% of the students felt the internet was better as it was easy to access, 31% it helps in better understanding of concepts, 20% cope up with syllabus, 17% stay updated with information. 62% of the participants agreed that the internet helps in finding solutions quicker. 62% of the students felt that their academic performance would improve with the help of the internet. 65% the students felt that the internet is beneficial during the current lockdown. 43% of the participants felt internet was beneficial during the lockdown as it helped in online classes, 32% of the participants accepted that internet helped to stay with the course, 26% of the participants felt internet helped in conducting surveys and in doing research.

The study presents that 11% of first year students, 7% of second year students, 1% of third year students, 1% of fourth year students and 3% of fifth year students spent 2-3 hours on the internet; 5% of first year students, 8% of second year students and 3% of third students spent 3-4 hours on the internet; 7% of first year students, 13% of second year students, 2% of third students and 4% of fourth year students spent 4-5 hour on the internet and 6% of first year students, 23% of second year students spent more than 5 hours on the internet. 20% of first year students, 27% of second year students, 4% of third year students, 2% of fourth year students and 3% of fifth year students preferred the internet over books for studying. 23% of first year students, 26% of second year students, 6% of third year students, 5% of fourth year students and 2% of fifth year students agreed that with the help of internet solutions can be found quicker. 23% of first year students, 29% of second year students, 5% of third year students, 4% of fourth year students and 1% of fifth year students agreed that academic performance would improve with the help of the internet.

On analysing the results came out to be 34% of the participants spent more than 5 hours on the internet, 26% spent 4 to 5 hours on the internet, 22% spent 2 to 3 hours, 18% spent 3 to 4 hours on the internet. In a survey conducted Keith J, among 1078 students, averaged 229 minutes per day (90.2%). 90.2% spent 73 minutes per day [12]. In another study college students use the internet for communication and information gathering by the age of 18 years. On average about 30 to 60 minutes per day [13]. 56% of the participants preferred the internet over books for studying while 44% did not. University students can gain many benefits from using the internet for their academic purposes [14]. These advantages could comprise accessing online journals, learning different languages, doing educational research, browsing virtual libraries and obtaining full academic degrees [15]. Dental students can also learn about the latest updates in the field of dentistry [16][17][18]. Students in the field of dentistry can know about the techniques of different procedures [19]. 68% of the participants felt the internet

as a better source of information while 32% of the participants did not. 62% of the participants felt the internet helped in finding solutions quicker while 32% did not feel the internet was better. Students reported different benefits of using the internet such as updating themselves, helping them with studies, solving their problems, and making good relations with others. These findings are consistent with previous research studies [20,21]. For example, Alzayyat et al. (2015) in their descriptive study among Jordan university students revealed that students used the Internet mostly for socialization with others, entertainment, and academic purposes [20]. 43% of the participants felt the internet is beneficial as it helped in staying in touch with the course, 31% due to online classes while 26% felt as it aided in conducting surveys or in doing research. Using the internet has the potential to improve the quality of education. This is supported by Laurillard (1992) who postulated that computer-based learning can boost understanding of theoretical and critical concepts [22]. Ciglaric et al. (1998) considers the popularity of the Internet as a teaching-learning tool developed with the introduction of the web browser, which uses a hypertext concept [23]. 65% of the participants felt the internet is useful during the current lockdown due to the novel coronavirus disease [COVID-19]. In a study conducted by Basilaia & Kvavadze revealed that based on the first-week statistics of the online teaching process at one of the private schools in Georgia, hence concluded that transition from the traditional to the online education systems at the school was successful [24].The present research has origins from previous studies, where the investigators involved in studies which were done based on clinical reports, interventional studies [25,26], in vitro studies and systematic reviews [27,28].

Fig 1: Which year?

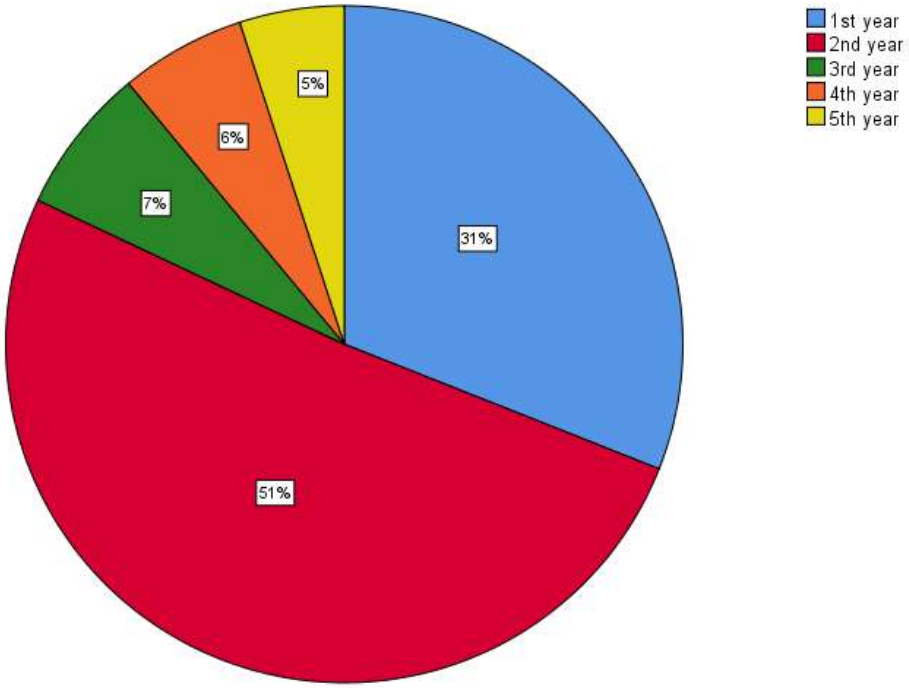

Figure 1: The pie chart depicting the percentage distribution of year of study. 31% were 1st year (blue) and 51% were 2nd year (red), 7% were 3rd year (green), 6% were 4th year (orange) and 5% were 5th year (yellow).

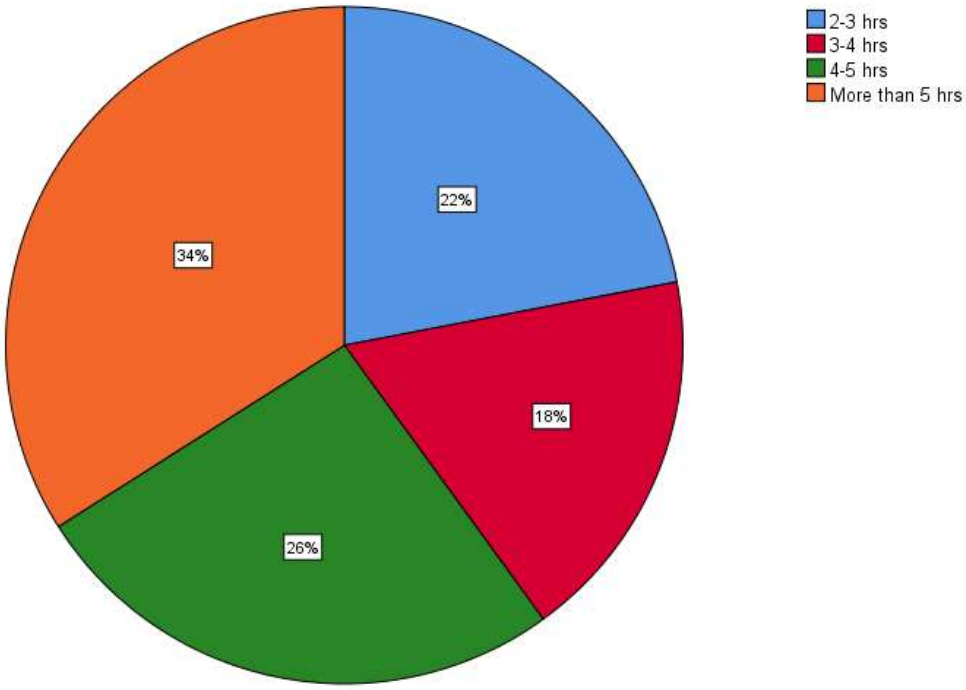

Figure 2: The pie chart depicting the percentage distribution of hours spent on the internet by the participants. 22% of the participants spent 2-3 hours (blue), 18% of the participants sent 3-4 hours (red), 26% of the participants spent 4-5 hours and 34% of the participants spent more than 5 hours on the internet (orange).

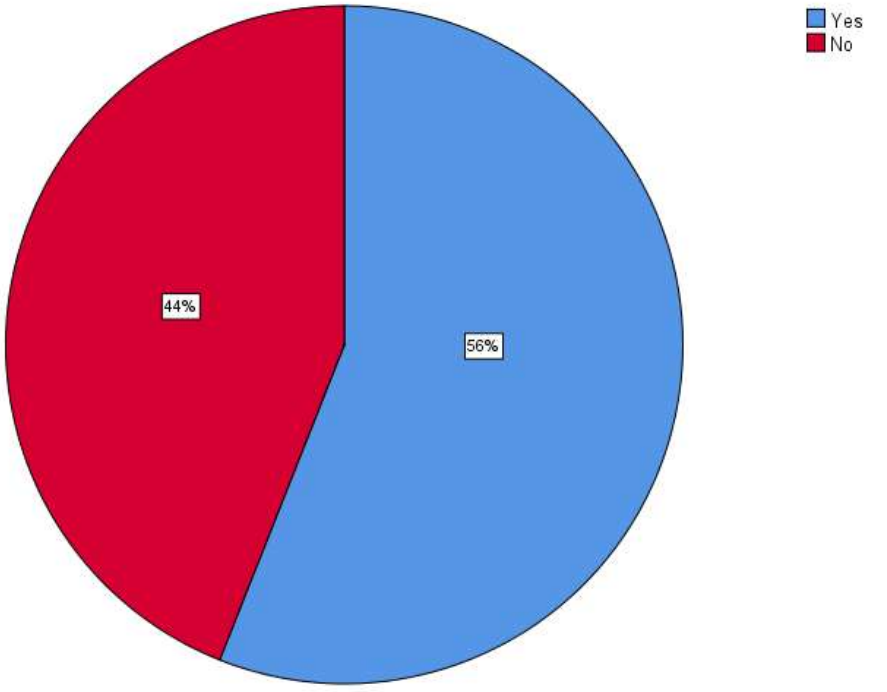

Figure 3: The pie chart depicting the percentage distribution of preference of the internet over books for studying by the participants. 56% of the participants preferred the internet over books for studying (blue) and 44% of the participants did not prefer (red).

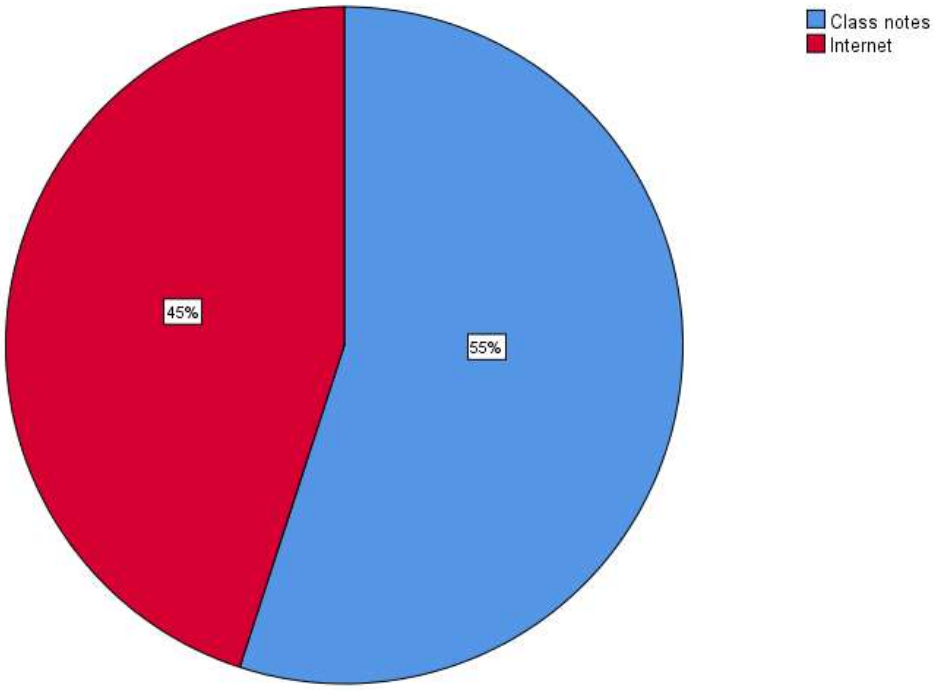

Figure 4: The pie chart depicting the percentage distribution of preference of either class notes or internet to clear doubts. 55% of the participants preferred class notes to clear doubts (blue) and 45% of the participants preferred the internet to clear doubts (red).

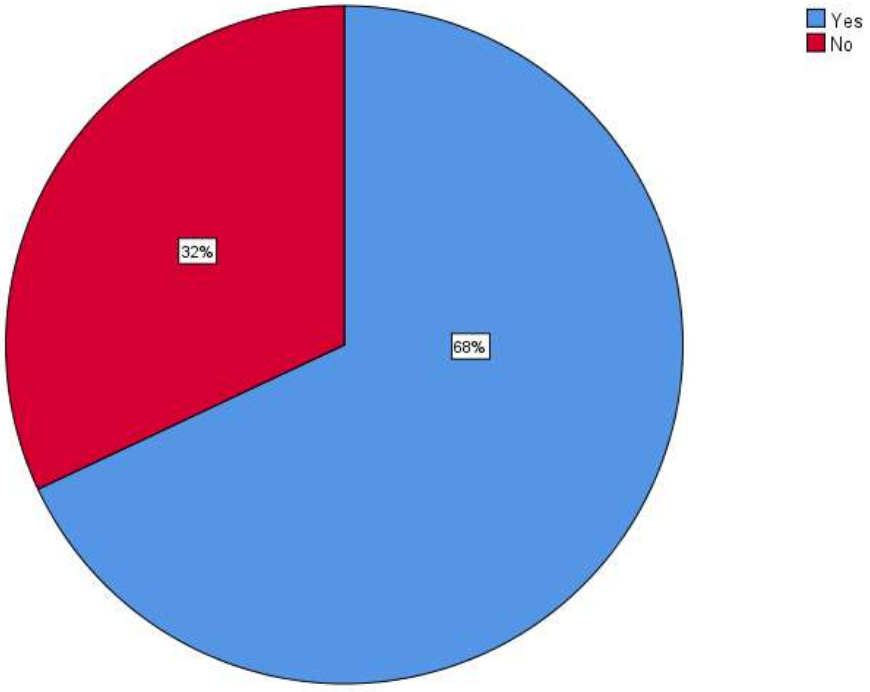

Figure 5: The pie chart depicting the percentage distribution of whether the internet is a better source of information. 68% of the participants agreed that the internet was a better source of information (blue) and 32% of the participants did not agree (red).

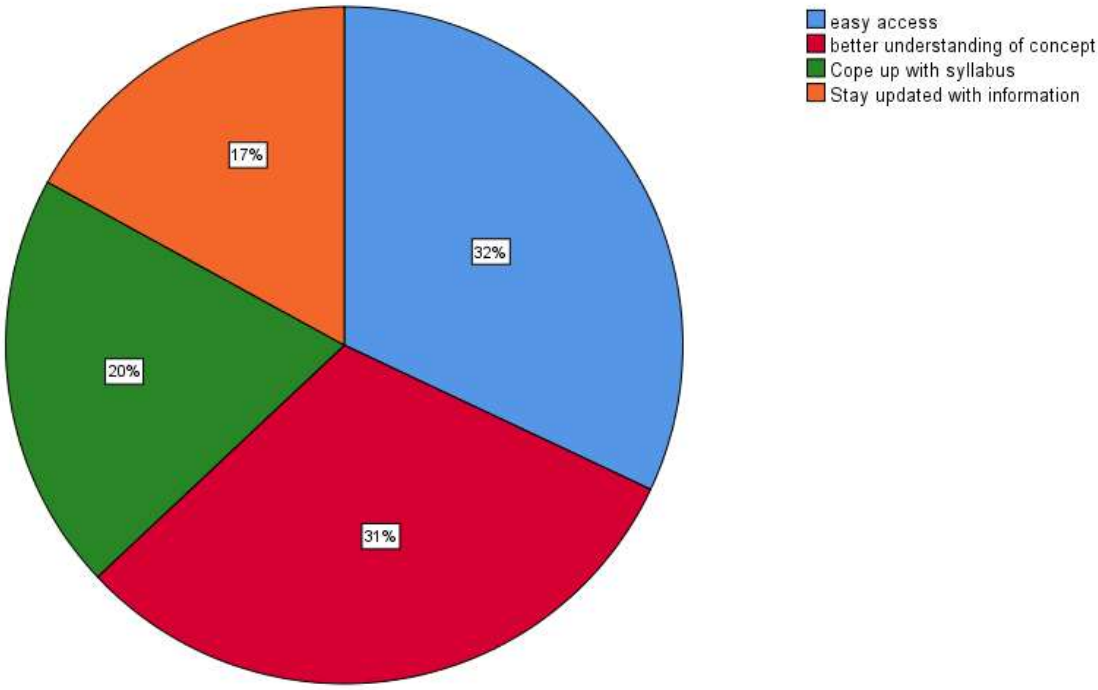

Figure 6: The pie chart depicting the percentage distribution of the reason for internet is a better source of information. 32% of the participants agreed that the internet was a better source of information as it was easy to access (blue), 31% of the participants responded to better understanding of concept (red), 20% of the participants responded to coping with syllabus (green) and 17% of the participants responded to staying updated with information (orange).

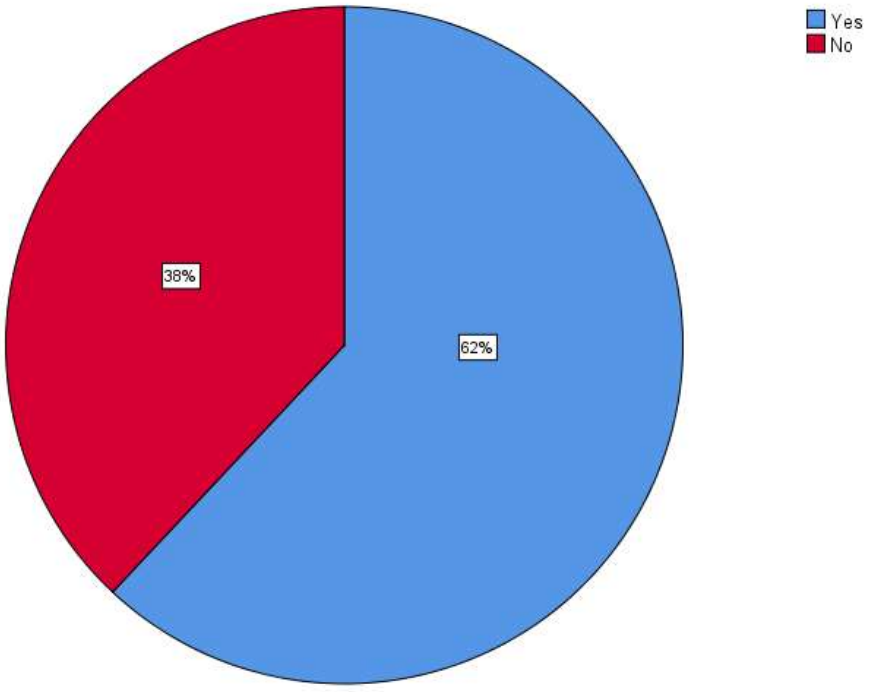

Figure 7: The pie chart depicting the percentage distribution of preference of internet to find solutions quicker. 62% of the participants preferred the internet to find solutions quicker (blue) and 38% of the participants did not prefer (red).

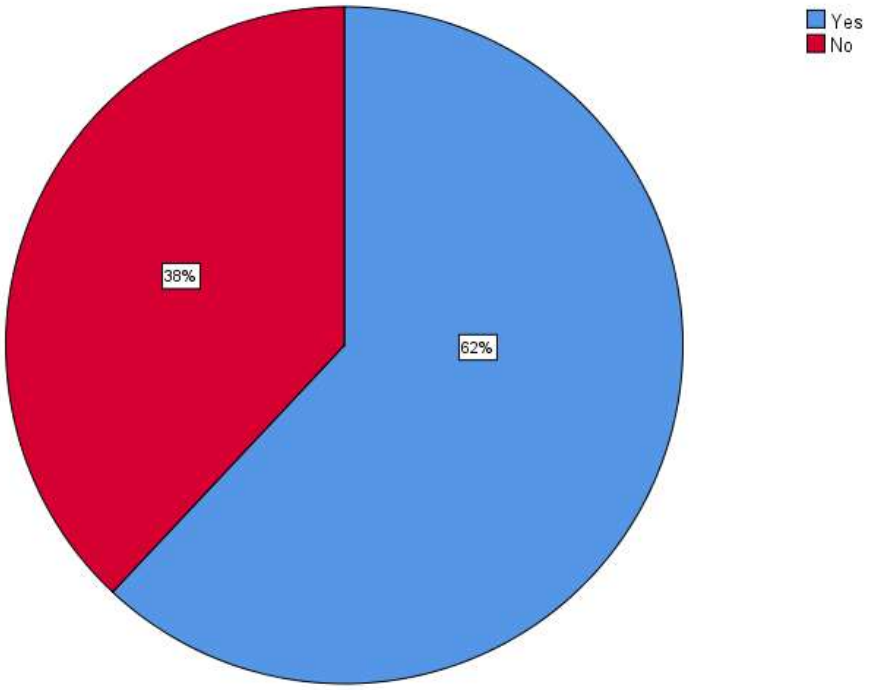

Figure 8: The pie chart depicting the percentage distribution for whether the internet would help improve academic performance. 62% of the participants agreed that the internet would help improve academic performance (blue) and 38% of the participants did not agree (red).

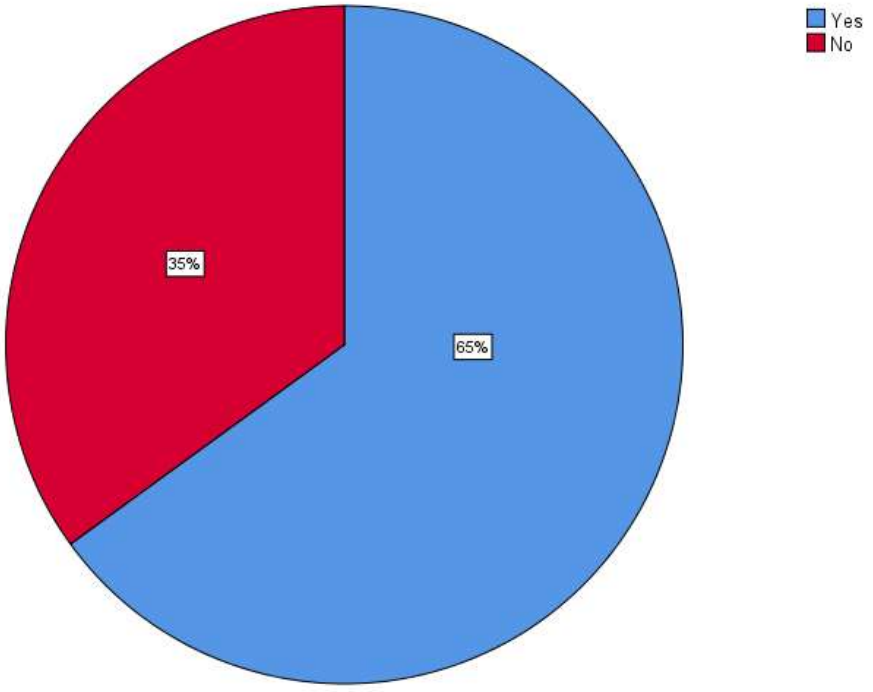

Figure 9: The pie chart depicting the percentage distribution for whether the internet is beneficial during the current lockdown. 65% of the participants responded to internet is beneficial during lockdown (blue) and 35% of the participants responded to internet is not beneficial during lockdown (red).

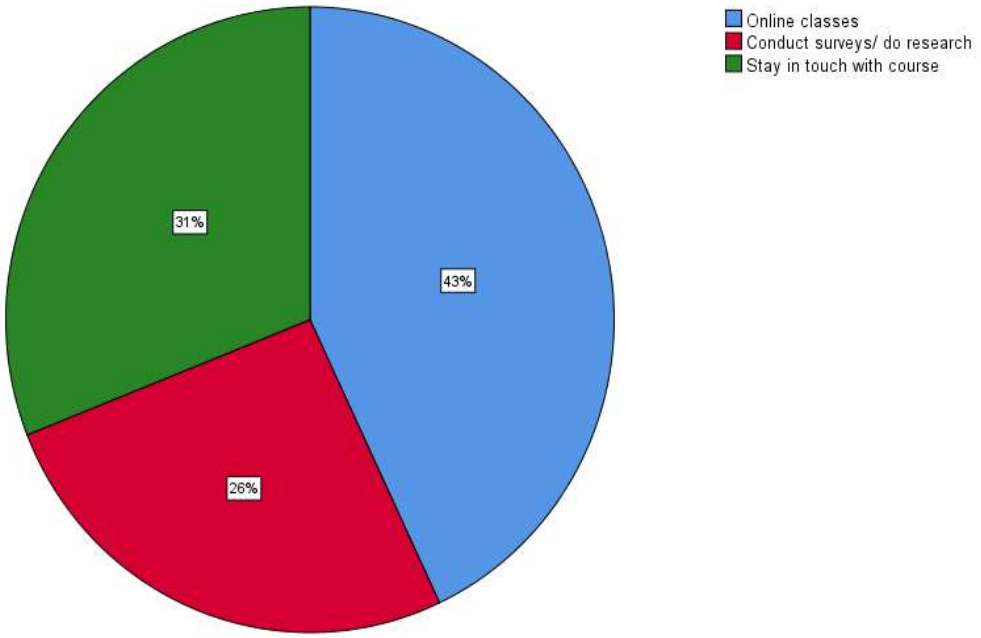

Figure 10: The pie chart depicting the percentage distribution of reason for internet is beneficial during the current lockdown. 43% of the participants responded to internet is beneficial in attending online classes (blue), 26% of the participants responded to conducting surveys and doing research (red) and 31% of the participants responded to staying in touch with the course (yellow).

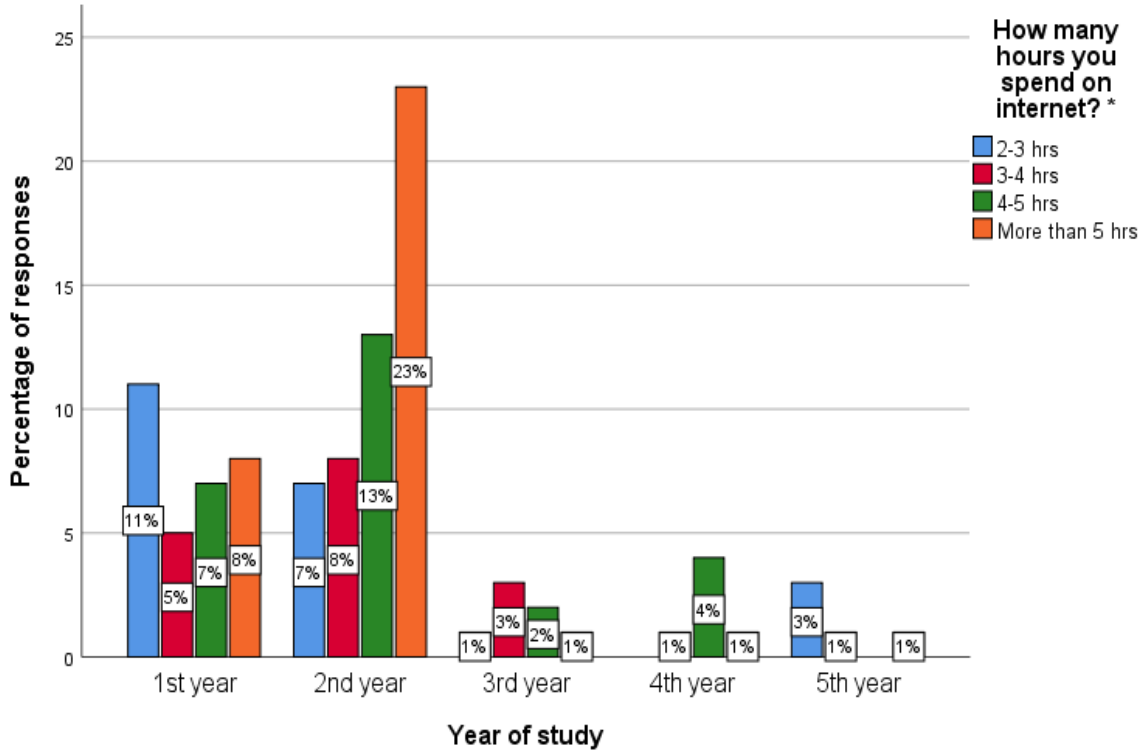

Figure 11: The bar graph represents the association between year of study and hours spent on the internet by the participants. X axis represents the year of study and Y axis represents the percentage of responses. Blue denotes 2-3 hours spent on the internet, red denotes 3-4 hours, green denotes 4-5 hours, orange denotes more than 5

hours spent on the internet. Among the student population majority of the second year students found to use the internet more than others. Chi square test was done. Chi Square Value: 20.929, DF: 12, p value- 0.051 (p> 0.05) it is statistically not significant.

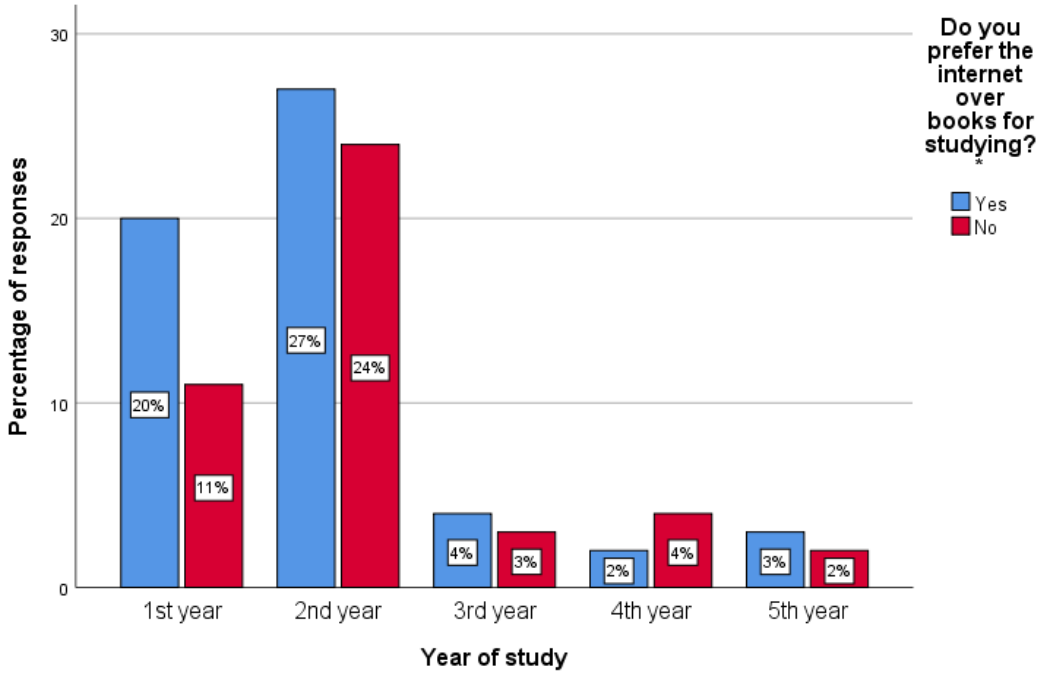

Figure 12: The bar graph represents the association between year of study and preference of the internet over books for studying. X axis represents the year of study and Y axis represents the percentage of responses. Blue denotes the response yes, red denotes the response no. Among the study population majority of the second year students preferred the internet over books for studying. Chi square test was done. Chi Square Value: 2.393, DF: 4, p value- 0.664 (p> 0.05) it is statistically not significant.

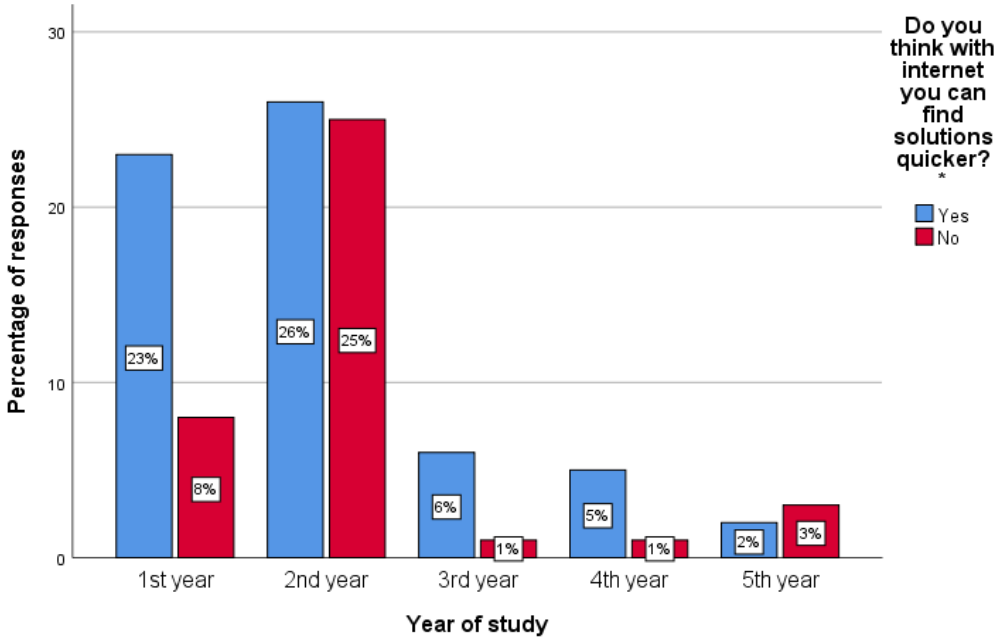

Figure 13: The bar graph represents the association between year of study and preference of internet to find solutions quicker. X axis represents the year of study and Y axis represents the percentage of responses. Blue denotes the response yes, red denotes the response no. Majority of second year students preferred the internet to find solutions quicker. Chi square test was done. Chi Square Value: 8.442, DF: 2, p value- 0.077 (p> 0.05) it is statistically not significant.

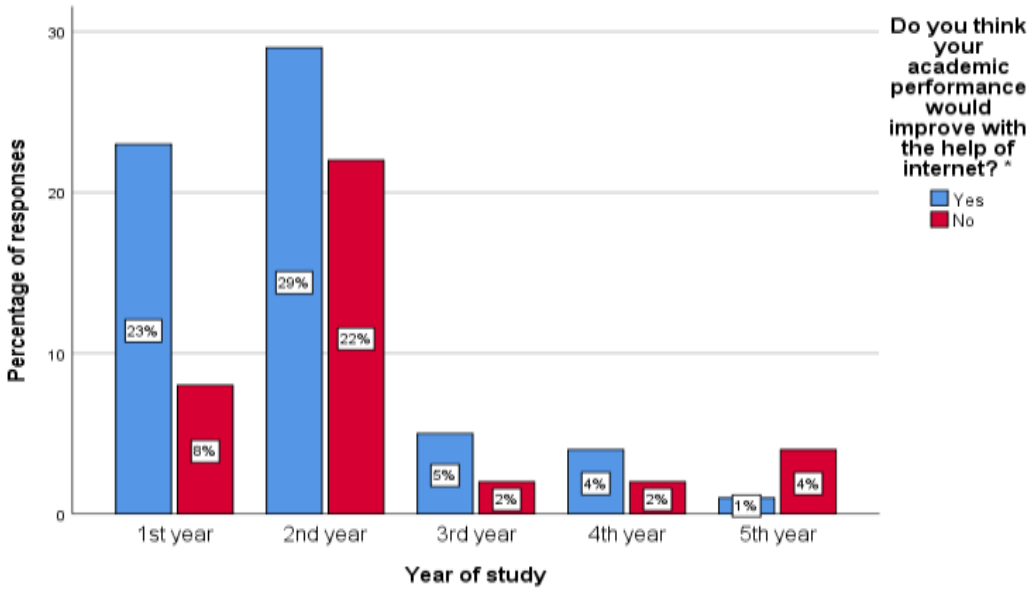

Figure 14: The bar graph represents the association between year of study and whether internet would help to improve academic performance. X axis represents the year of study and Y axis represents the percentage of responses. Blue denotes the response yes, red denotes the response no. Majority of second year students agreed that academic performance would improve with the help of the internet. Chi Square Value: 6.591 , DF: 4, p value- 0.159 (p> 0.05) it is statistically not significant.

LIMITATIONS

The current study is limited to a study population of 100 dental students. The survey was conducted among undergraduate dental students.

FUTURESCOPE

Further the study can be carried out among dental students of other institutions and also include postgraduate students, it can be conducted for more than 100 participants for showing better results on the effect of internet dependency on the study skills of dental students.

CONCLUSION

This study concludes majority of the students are using the internet for a very long hours, most of them prefer internet over traditional learning. Internet is a good source of knowledge but healthy and timely use of the internet leads to positive outcomes in various aspects and students can use it as a valuable tool for enhancing their academic skills and improving their knowledge.

ACKNOWLEDGEMENT

This research was done under the supervision of the Department of Research of Saveetha Dental College and Hospitals. We sincerely show gratitude to the corresponding guides who provided insight and expertise that greatly assisted the research

AUTHORS CONTRIBUTION

Author 1 (Swetha R), carried out the study by collecting data and drafted the manuscript after performing the necessary statistical analysis. Author 2 (Dr. L. Keerthi Sasanka) aided in conception of the topic, has participated in the study design, statistical analysis and has supervised in preparation of the manuscript. Author 3 (Dr. Dinesh Premavathy) has participated in the study design and has coordinated in developing the manuscript. All the authors have discussed the results among themselves and contributed to the final manuscript.

CONFLICTS OF INTEREST

None declared

REFERENCES

1. Bhat M. Internet revolution. Br Dent J. 2007 Jun 9;202(11):645.

2. Suhail K, Bargees Z. Effects of excessive Internet use on undergraduate students in Pakistan. Cyberpsychol Behav. 2006 Jun;9(3):297–307.

3. Akintunde OA, Ayodeji IO. Assessment of internet usage amongst Nigerian students — A case study approach [Internet]. 2014 IEEE International Conference on Industrial Technology (ICIT). 2014. Available from: http://dx.doi.org/10.1109/icit.2014.6895021

4. Vijayalakshmi B, Ganapathy D. Medical management of cellulitis [Internet]. Vol. 9, Research Journal of Pharmacy and Technology. 2016. p. 2067. Available from: http://dx.doi.org/10.5958/0974-360x.2016.00422.4

5. Selvan SR, Ganapathy D. Efficacy of fifth generation cephalosporins against methicillin-resistant Staphylococcus aureus-A review [Internet]. Vol. 9, Research Journal of Pharmacy and Technology. 2016. p. 1815. Available from: http://dx.doi.org/10.5958/0974-360x.2016.00369.3

6. Ashok V, Suvitha S. Awareness of all ceramic restoration in rural population [Internet]. Vol. 9, Research Journal of Pharmacy and Technology. 2016. p. 1691. Available from: http://dx.doi.org/10.5958/0974-360x.2016.00340.1

7. Basha FYS, Ganapathy D, Venugopalan S. Oral Hygiene Status among Pregnant Women [Internet]. Vol. 11, Research Journal of Pharmacy and Technology. 2018. p. 3099. Available from: http://dx.doi.org/10.5958/0974-360x.2018.00569.3

8. Duraisamy R, Krishnan CS, Ramasubramanian H, Sampathkumar J, Mariappan S, Navarasampatti Sivaprakasam A. Compatibility of Nonoriginal Abutments With Implants: Evaluation of Microgap at the Implant-Abutment Interface, With Original and Nonoriginal Abutments. Implant Dent. 2019 Jun;28(3):289–95.

9. Ranganathan H, Ganapathy DM, Jain AR. Cervical and Incisal Marginal Discrepancy in Ceramic Laminate Veneering Materials: A SEM Analysis. Contemp Clin Dent. 2017 Apr;8(2):272–8.

10. Ganapathy D. Effect of Resin Bonded Luting Agents Influencing Marginal Discrepancy in All Ceramic Complete Veneer Crowns [Internet]. JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH. 2016. Available from: http://dx.doi.org/10.7860/jcdr/2016/21447.9028

11. Ajay R, Suma K, Ali S, Sivakumar JK, Rakshagan V, Devaki V, et al. Effect of surface modifications on the retention of cement-retained implant crowns under fatigue loads: An In vitro study [Internet]. Vol. 9, Journal of Pharmacy And Bioallied Sciences. 2017. p. 154. Available from: http://dx.doi.org/10.4103/jpbs.jpbs_146_17

12. Anderson KJ. Internet Use Among College Students: An Exploratory Study [Internet]. Vol. 50, Journal of American College Health. 2001. p. 21–6. Available from: http://dx.doi.org/10.1080/07448480109595707

13. Gordon CF, Juang LP, Syed M. Internet Use and Well-Being Among College Students: Beyond Frequency of Use. J Coll Stud Dev. 2007;48(6):674–88.

14. Bonk CJ. The World Is Open: How Web Technology Is Revolutionizing Education. John Wiley & Sons; 2009. 512 p.

15. Al-Gamal E, Alzayyat A, Ahmad MM. Prevalence of Internet Addiction and Its Association With Psychological Distress and Coping Strategies Among University Students in Jordan. Perspect Psychiatr Care. 2016 Jan;52(1):49–61.

16. Jyothi S, Robin PK, Ganapathy D, Anandiselvaraj. Periodontal Health Status of Three Different Groups Wearing Temporary Partial Denture [Internet]. Vol. 10, Research Journal of Pharmacy and Technology. 2017. p. 4339. Available from: http://dx.doi.org/10.5958/0974-360x.2017.00795.8

17. Fiber Posts and Endodontically Treated Teeth: A Compendium of Scientific and Clinical Perspectives. MODERN DENTISTRY MEDIA; 2008. 172 p.

18. Venugopalan S, Ariga P, Aggarwal P, Viswanath A. Magnetically retained silicone facial prosthesis. Niger J Clin Pract. 2014 Mar;17(2):260–4.

19. Kannan A, Venugopalan S. A systematic review on the effect of use of impregnated retraction cords on gingiva [Internet]. Vol. 11, Research Journal of Pharmacy and Technology. 2018. p. 2121. Available from: http://dx.doi.org/10.5958/0974-360x.2018.00393.1

20. Alzayyat A, Al-Gamal E, Ahmad MM. Psychosocial correlates of Internet addiction among Jordanian university students. J Psychosoc Nurs Ment Health Serv. 2015 Apr;53(4):43–51.

21. Ni X, Yan H, Chen S, Liu Z. Factors Influencing Internet Addiction in a Sample of Freshmen University

Students in China [Internet]. Vol. 12, CyberPsychology & Behavior. 2009. p. 327–30. Available from: http://dx.doi.org/10.1089/cpb.2008.0321

22. Laurillard D. Learning through collaborative computer simulations [Internet]. Vol. 23, British Journal of Educational Technology. 1992. p. 164–71. Available from: http://dx.doi.org/10.1111/j.1467-8535.1992.tb00327.x

23. Nentwich M. Cyberscience: Research in the Age of the Internet. Austrian Academy of Sciences; 2003. 569 p.

24. Basilaia G, Kvavadze D. Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia [Internet]. Vol. 5, Pedagogical Research. 2020. Available from: http://dx.doi.org/10.29333/pr/7937

25. Ariga P, Nallaswamy D, Jain AR, Ganapathy DM. Determination of Correlation of Width of Maxillary Anterior Teeth using Extraoral and Intraoral Factors in Indian Population: A Systematic Review [Internet]. Vol. 9, World Journal of Dentistry. 2018. p. 68–75. Available from: http://dx.doi.org/10.5005/jp-journals-10015-1509

26. Ashok V, Nallaswamy D, Benazir Begum S, Nesappan T. Lip Bumper Prosthesis for an Acromegaly Patient: A Clinical Report. J Indian Prosthodont Soc. 2014 Dec;14(Suppl 1):279–82.

27. Subasree S, Murthykumar K, Dhanraj. Effect of Aloe Vera in Oral Health-A Review [Internet]. Vol. 9, Research Journal of Pharmacy and Technology. 2016. p. 609. Available from: http://dx.doi.org/10.5958/0974-360x.2016.00116.5

28. Ganapathy DM, Kannan A, Venugopalan S. Effect of Coated Surfaces influencing Screw Loosening in Implants: A Systematic Review and Meta-analysis [Internet]. Vol. 8, World Journal of Dentistry. 2017. p. 496–502. Available from: http://dx.doi.org/10.5005/jp-journals-10015-1493

29. Farhat Yaasmeen Sadique Basha, Rajeshkumar S, Lakshmi T, Anti-inflammatory activity of Myristica fragrans extract . Int. J. Res. Pharm. Sci., 2019 ;10(4), 3118-3120 DOI: https://doi.org/10.26452/ijrps.v10i4.1607