

Lifestyle and Dental Health Behaviours among Outpatients in a Dental College in Chennai-An Institutional Study

Srivarsan R¹ and L Leelavathi^{2*}

¹Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai, India,

²Department of Public Health Dentistry, Saveetha Dental college and Hospitals, Saveetha University, SIMATS, Chennai, Tamil Nadu, India

Corresponding author:

Leelavathi L,
Department of Public Health Dentistry,
Saveetha Dental college and Hospitals,
Saveetha University,
SIMATS, Chennai-600077,
Tamil Nadu, India,
E-mail: leelavathi.sdc@saveetha.com

Received: 28-02-2022,
Manuscript No. AMHSR-22-55706;
Editor assigned: 02-03-2022,
Pre QC No. AMHSR-22-53706(PQ);
Reviewed: 16-03-2022,
QC No. AMHSR-22-53706(Q);
Revision: 20-03-2022,
Manuscript No: AMHSR-22-53706(R);
Published: 30-03-2022,
DOI: 10.54608.annalsmedical.2022.s1

Abstract

Introduction: Dental and oral health is an essential part of your overall health and well-being. Poor oral hygiene can lead to dental cavities and gum disease, and has also been linked to heart disease, cancer, and diabetes. **Aim:** Aim of the study is to assess the lifestyle and dental health behavior among outpatients in a private dental college. **Materials & Methods:** This cross-sectional study was conducted among patients visiting private dental College, Chennai. The survey was conducted among 104 outpatients. Interviewer administered questionnaire was used and the collected data was analyzed using a chi-square test. **Results:** About 78% of people visit the dentist regularly and about 82% brush their teeth once a day and the rest of 18% brush their teeth twice a day. about 56% of respondents do not consume tobacco and 32% consume tobacco occasionally. Tobacco consumption was less among those who visited the dentist when compared with those who haven't visited (p value 0.00). Gum health was perceived as excellent by more numbers of males than females (p value 0.00). **Conclusion:** Male study participants and educated individuals were found to be significantly associated with positive dental health behavior. Dental visit and reduced tobacco consumption was significantly associated among the study participants.

Keywords: Lifestyle; Outpatient, Knowledge; Awareness; Oral health; Innovative analysis; Dental health behavior

Introduction

According to the Fédération Dentaire Internationale (FDI) "Oral health is multifaceted and includes the ability to speak, smile, smell, taste, touch, chew, swallow, and convey a range of emotions through facial expressions with confidence and without pain, discomfort, and disease of the craniofacial complex".^[1]

Lifestyle is the interests, opinions, behaviors, and behavioral orientations of an individual, group, or culture. A lifestyle refers to an individual's attitude, way of life, values and worldview. Therefore, a lifestyle is a means of forging a sense of self and to create cultural symbols that resonate with personal identity. Lifestyle modification and changes in health related behavior would reduce the unhealthy behavior.^[2]

Oral health is multifaceted and includes the ability to speak, smile, taste, chew and convey a range of emotions through facial expressions with confidence and without pain, discomfort and disease of the craniofacial complex. Oral health is an integral part of general health and oral health should not be viewed separately. Dental and oral health is an essential part of your overall health and well-being. Poor oral hygiene can lead to dental cavities and gum disease, and has also been linked to heart disease, cancer, and diabetes. Maintaining healthy teeth and gums is a lifelong commitment. The earlier you learn proper oral hygiene habits such as brushing, flossing, and limiting your sugar intake the easier it'll be to avoid costly dental procedures and long-term health issues.

Lifestyle plays a huge role in health, wellness and fitness. Today's urban lifestyle where one doesn't stop and take time for themselves is causing more harm than good when it comes to physical and emotional health. Lack of healthy eating options has contributed to obesity in many individuals of all age groups today. Children are being encouraged to stay indoors due to much more entertainment options available digitally which has led to decrease in sports participation in the youth age group.^[1-3]

A person's lifestyle makes up a major part of their personality. Therefore, having a healthy lifestyle will automatically result in healthy oral health.^[4] A healthy mouth, free of infections, injuries and other problems with teeth and gums, is important in maintaining your overall health. Although a different set of medical professional's focuses on dental health, they are still part of your regular health care team.

Disease and other conditions can affect your dental health and dental problems can affect other parts of your body. Failing to properly care for your oral health may lead to other health problems. You can help prevent or minimize many oral health problems by regular preventive steps (brushing, flossing and so

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

How to Cite this Article: Leelavathi L, et al. Lifestyle and Dental Health Behaviours among Outpatients in a Dental College in Chennai-An Institutional Study. Ann Med Health Sci Res. 2022;12:S1:109-114.

on) and regular visits to dental health professionals.

Lifestyle has a greater impact on oral and dental health therefore we must have a proper lifestyle to have and good oral and dental health. ^[5] This research will create awareness among outpatients about oral health behavior and lifestyle. ^[5,6] Our team has extensive knowledge and research experience that has translate into high quality publications. ^[7-26] Aim of the study is to assess the lifestyle and dental health behavior among outpatients in a private dental college in Chennai.

Materials and Methods

Study design

A cross sectional questionnaire study.

Study setting

Saveetha Dental College in Chennai. An institutional based study

Study population

Study was conducted among 104 outpatients visiting a private dental college in Chennai.

Ethical clearance

Prior to the start of the study, ethical clearance was obtained from the institutional ethical committee.

Sampling methodology

Non probability convenience sampling was followed to select the study participants. All those who were willing to participate were included in the study and those who were not willing to participate were excluded from the study.

Survey instrument

An interviewer administered questionnaire of 10 closed ended

questions was prepared. It was conducted in an interview type including demographic details, lifestyle behaviors and oral health behaviors of the outpatients.

Statistical analysis

The responses were collected and tabulated in the excel sheet and analyzed. Chi square test was used to analyses the data. Independent variables are age, gender, education. Dependent variables are knowledge, attitude responses.

Results

About 82 (78.8%) respondents belong to the age group of 18-35 years whereas 12 (11.5%) respondents belonged to the age group of 36-55 and the rest of 10 (9.6%) belonged to the age group of 56 and above. About 51 (50%) respondents were males whereas the rest of 48% (49%) were females. About 21(20%) of respondents were undergraduates, 29 (28%) were postgraduate, 23% had passed higher secondary and 28(29%) had passed primary, about 79 (80%) regularly visited dentists whereas 21(20%) did not visit regularly. About 49 respondents use toothbrushes to clean their teeth, 18 use plastic toothpicks, 17 respondents use miswak and the rest of 16% use wooden toothpicks. About 82 brush their teeth once a day and the rest of 18 brush their teeth twice a day. About 62% of people had teeth or mouth problems during the past 12 months. And about 37% of people do not face any discomforts. About 51% of people have visited a dentist before 6 to 12 months, 7% of people visited less than six months ago and 12% have never visited a dentist in recent days. About 44% of people visited a dentist due to pain in teeth, gum and mouth. 37% of people visited for follow-up treatments. 11% of people visited for regular visiting or consulting and 7% visited for routine treatment. About 44 respondents do not consume alcohol, 31 (31%) respondents consume alcohol weekly once, 25 consume occasionally (Figure 1). About 56 (56%) respondents do not consume tobacco,

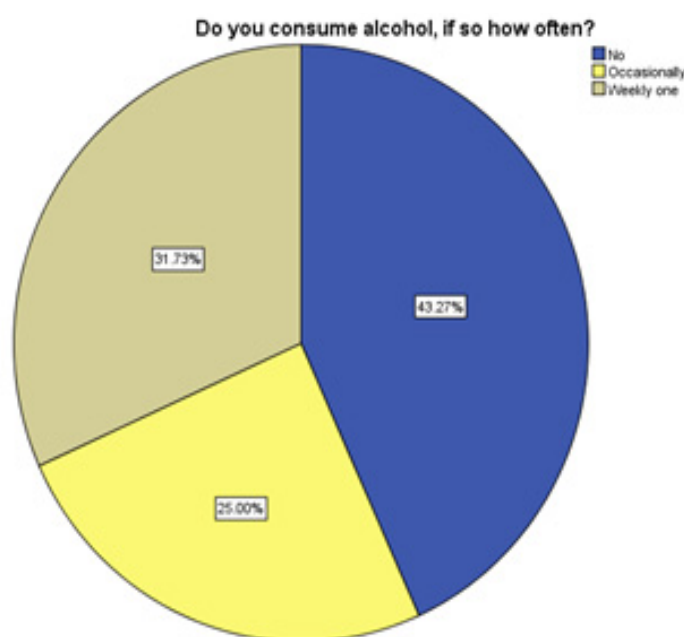


Figure 1: Shows the response for the following question "how often do you consume alcohol" About 44 (44%) respondents do not consume alcohol, 31 (31%) respondents consume alcohol weekly once, 25 (25%) consume occasionally.

32 consume tobacco occasionally (Figures 2 and 3). About 23(23%) eat fruits and vegetables weekly once, 28(29%) eat weekly once 10(10%) eat occasionally and 19(18%) eat daily, 27(26%) of people have average state of teeth 23 have good state 16 have very good state and 32(31%) have very poor states of teeth (Figure 4). Association of education of participants and alcohol consumption revealed that most undergraduate students reported that they do not take alcohol but postgraduate people consume alcohol weekly once and higher secondary people

consume occasionally. On analyzing the association of gender with the self perception about their gums and teeth showed that gum health and teeth status was perceived as excellent by more numbers of males than females (Figures 5 and 6). Association of education of participants and tobacco consumption showed that most of the undergraduate students reported that they do not take tobacco but postgraduate people consume tobacco weekly once and higher secondary consume occasionally (figure 7).

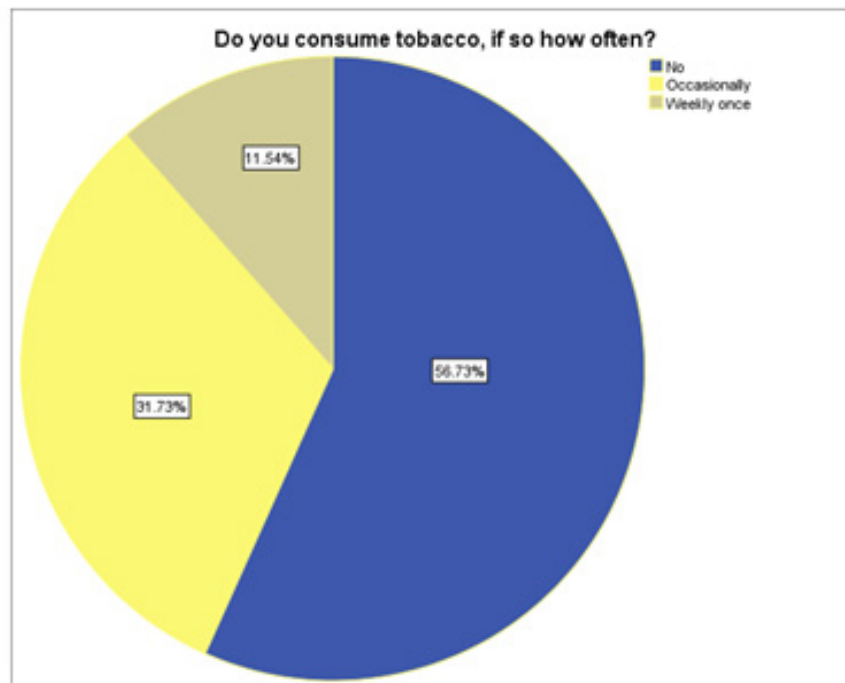


Figure 2: Shows the distribution of study participants based on tobacco consumption. About 56 (56%) respondents do not consume tobacco, 32 (32%) consume tobacco occasionally and 11(11%) does tobacco weekly once.

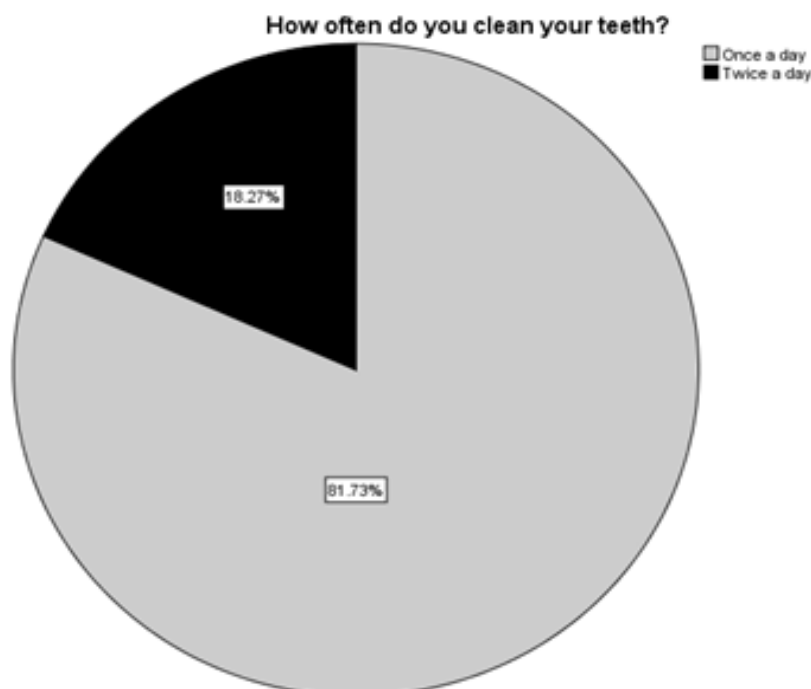


Figure 3: Shows the distribution of study participants based on their brushing frequency. About 82 (82%) brush their teeth once a day and the rest of 18 (18%) brush their teeth twice a day.

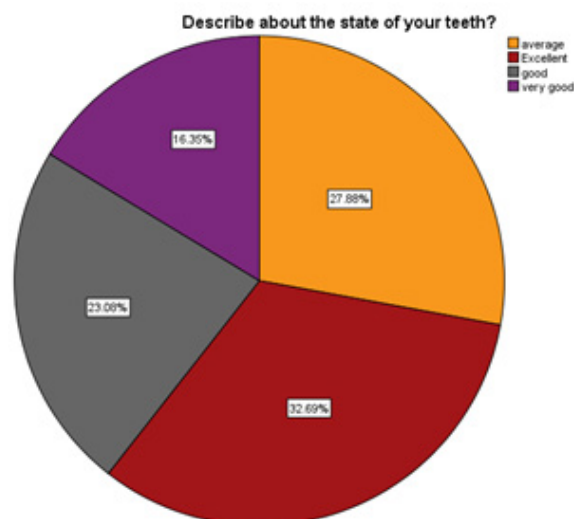


Figure 4: Shows the response for the following question “describe the state of your teeth”. About 27(26%) of people have an average state of teeth 23(23%) have a good state 16(16%) have a very good state and 32(31%) have very poor states of teeth.

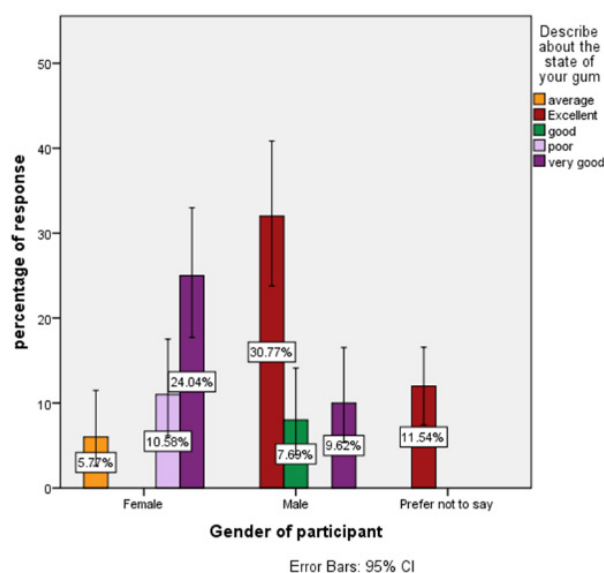


Figure 5: Showing the association of gender and the self-perception about their gums. Gum health was perceived as excellent by more numbers of males than females. This was found to be statistically significant. (Pearson Chi-Square - 57.269; p value 0.00).

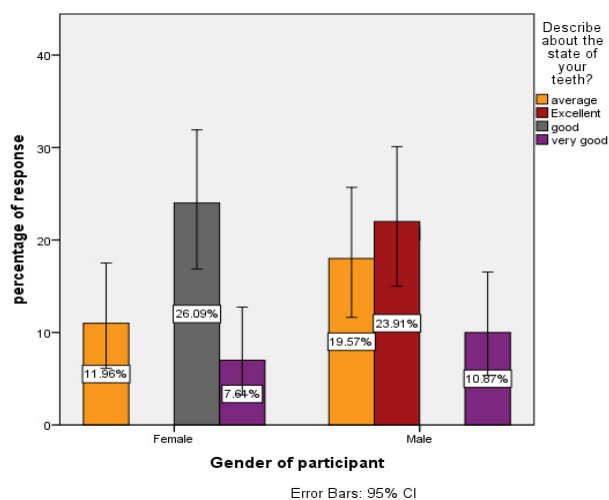


Figure 6: Showing the association of gender and the self-perception about the state of their teeth. Teeth status was perceived as excellent by more males than females. This was found to be statistically significant. (Pearson Chi-Square - 42.592; p value 0.00).

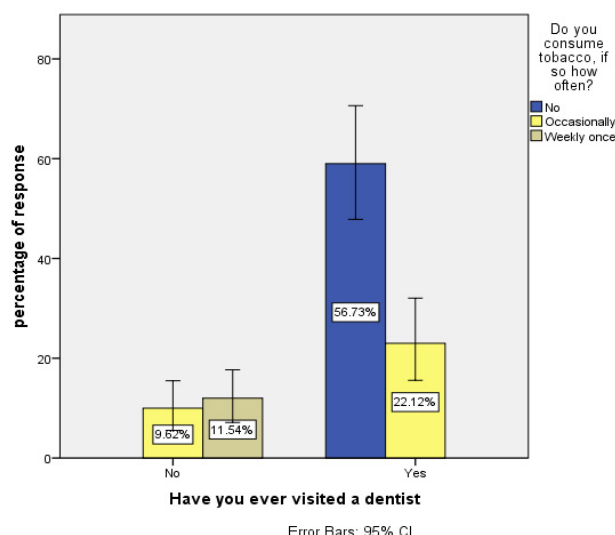


Figure 7: Showing the association of dental visits and tobacco consumption of the participants. Tobacco consumption was less among those who visited dentist when compared with those who haven't visited and this was statistically significant suggesting dental visit reduces tobacco consumption (Pearson Chi-Square - 62.293; p value 0.00).

Discussion

The main objective of this study is to determine the various factors that influence dental health behavior. Measures of lifestyle included dietary habits, smoking habits and physical activity. Oral health is multifaceted and includes the ability to speak, smile, taste chew and convey a range of emotions through found expressions with confidence and without pain discomfort and disease of the craniofacial complex Oral health is an integral part of general health and oral health should not be viewed separately. Dental and oral health is an essential part of your overall health and well-being. Poor oral hygiene can lead to dental cavities and gum disease, and has also been linked to heart disease, cancer, and diabetes. Maintaining healthy teeth and gums is a lifelong commitment. The earlier you learn proper oral hygiene habits such as brushing, flossing, and limiting your sugar intake the easier it'll be to avoid costly dental procedures and long-term health issues. It was observed that age, gender, and lifestyle were significantly associated with dental behavior. [2] Age, gender and nationality were found to be significantly associated with lifestyle. Women were found to have better lifestyles than men. This might be due to the general cultural and social norms where women are more concerned about their general and oral health than men. Lifestyle showed statistically significant relation with age group; we observed that older individuals adopt healthier lifestyle habits compared to younger individuals. Lifestyle shows a statistically significant relation with nationality which might be due to differences in the cultural practices and the dietary habits. There was no significant association between SES and lifestyle or dental behavior. This found better dental health behavior among high SES individuals. However, the results of this study show that there were no participants who brushed their teeth once a day under the low SES category, which may be due to the small number of participants. Found that individuals with low SES tend to have worse oral hygiene habits compared to others. [4, 27].

Conclusion

Male study participants and educated individuals were found to be significantly associated with positive dental health behavior. Dental visit and reduced tobacco consumption was significantly associated among the study participants.

Acknowledgement

The authors would like to thank the study participants for their participation for their kind cooperation throughout the study.

Author Contributions

Literature search, survey, data collection, analysis, manuscript writing is carried out by Mr. Srivarsan and Study design, data verification, manuscript drafting is carried out by L. Leelavathi.

Conflicts of Interest

The authors declare that there are no conflicts of interest in the present study.

Source of Funding

The present study was supported by the following agencies

- Saveetha Dental College
- Saveetha Institute of Medical and Technical Science,
- Saveetha University
- Christy groups of companies, Thiruchengodu.

References

1. Baskaradoss JK, Geevarghese A, Al-Mthen A, Al-Ghamdi H, Al-Haudayris R, Al-Obaidy S, et al. Influence of lifestyle on dental health behavior. J Lifestyle Med 2019;9:119-124.
2. Eldarrat AH. Influence of oral health and lifestyle on oral malodour. Int Dent. J 2011;61:47-51.
3. Fujita Y, Maki K. Associations of smoking behavior with

- lifestyle and mental health among Japanese dental students. *BMC Med. Educ* 2018;18.
4. Eldarrat AH. WITHDRAWN: Influence of oral health and lifestyle on oral malodor. *Saudi Dent J* 2010.
5. Aydin U, Ozturk M, Kirbiyik S. prevalence of internet usage and access to health information among dental school outpatients. *Telemed J e-Health* 2004;1:444-448.
6. Suyanto B. lifestyle and consumption behavior among the urban middle class. *Proc Int Post-Grad Conf Media Commun* 2017.
7. Mathew MG, Samuel SR, Soni AJ, Roopa KB. Evaluation of adhesion of *Streptococcus mutans*, plaque accumulation on zirconia and stainless steel crowns, and surrounding gingival inflammation in primary molars: randomized controlled trial. *Clin Oral Investig* 2020;24(9):3275-3280.
8. Samuel SR. Can 5-year-olds sensibly self-report the impact of developmental enamel defects on their quality of life? *Int J Paediatr Dent* 2020;31(2):285-286
9. Samuel SR, Kuduruthullah S, Khair AMB, Al Shayeb M, Elkaseh A, Varma SR, et al. Impact of pain, psychological-distress, SARS-CoV2 fear on adults' OHRQOL during COVID-19 pandemic. *Saudi J Biol Sci* 2021;28(1):492-494.
10. Samuel SR, Kuduruthullah S, Khair AMB, Shayeb MA, Elkaseh A, Varma SR. Dental pain, parental SARS-CoV-2 fear and distress on quality of life of 2 to 6 year-old children during COVID-19. *Int J Paediatr Dent* 2021;31(3):436-441.
11. Samuel SR, Acharya S, Rao JC. School Interventions-based Prevention of Early-Childhood Caries among 3-5-year-old children from very low socioeconomic status: Two-year randomized trial. *J Public Health Dent* 2020;80(1):51-60.
12. Vikneshan M, Saravanakumar R, Mangaiyarkarasi R, Rajeshkumar S, Samuel SR, Suganya M, et al. Algal biomass as a source for novel oral nano-antimicrobial agent. *Saudi J Biol Sci* 2020;27(12):3753-3758.
13. Chellapa LR, Shanmugam R, Indiran MA, Samuel SR. Biogenic nanoselenium synthesis, its antimicrobial, antioxidant activity and toxicity. *Bioinspired Biomim Nanobiomaterials* 2020;9(3):184-189.
14. Samuel SR, Mathew MG, Suresh SG, Varma SR, Elsubeihi ES, Arshad F, et al. Pediatric dental emergency management and parental treatment preferences during COVID-19 pandemic as compared to 2019. *Saudi J Biol Sci* 2021; 28(4):2591-2597.
15. Barma MD, Muthupandiyani I, Samuel SR, Amaechi BT. Inhibition of *Streptococcus mutans*, antioxidant property and cytotoxicity of novel nano-zinc oxide varnish. *Arch Oral Biol.* 2021;126:105132.
16. Muthukrishnan L. Nanotechnology for cleaner leather production: a review. *Environ Chem Lett.* 2021;19(3):2527-49.
17. Muthukrishnan L. Multidrug resistant tuberculosis-Diagnostic challenges and its conquering by nanotechnology approach-An overview. *Chem-Biol Interact.* 2021;337:109397.
18. Sekar D, Auxilia PK. Letter to the Editor: H19 promotes HCC bone metastasis by reducing osteoprotegerin expression in a PPP1CA/p38MAPK-Dependent manner and sponging miR-200b-3p. *Hepatol* 2021.
19. Gowhari Shabgah A, Amir A, Gardanova ZR, Olegovna Zeki A, Thangavelu L, Ebrahimi Nik M, et al. Interleukin-25: New perspective and state-of-the-art in cancer prognosis and treatment approaches. *Cancer Med.* 2021;10(15):5191-5202.
20. Kamala K, Sivaperumal P, Paray BA, Al-Sadoon MK. Identification of haloarchaea during fermentation of *Sardinella longiceps* for being the starter culture to accelerate fish sauce production. *Int J Food Sci Technol.* 2021;56(11):5717-5725.
21. Ezhilarasan D, Lakshmi T, Subha M, Deepak Nallasamy V, Raghunandhakumar S. The ambiguous role of sirtuins in head and neck squamous cell carcinoma. *Oral Dis.* 2021.
22. Sridharan G, Ramani P, Patankar S, Vijayaraghavan R. Evaluation of salivary metabolomics in oral leukoplakia and oral squamous cell carcinoma. *J Oral Pathol Med* 2019;48(4):299-306.
23. Hannah R, Ramani P, Ramanathan A, Gheena S, Ramasubramanian A, Monika K. CYP2 C9 polymorphism among patients with oral squamous cell carcinoma and its role in altering the metabolism of benzo [a] pyrene. *Oral Surg Oral Med Oral Pathol Oral Radiol.* 2020;130(3):306-312.
24. Pc J, Marimuthu T, Devadoss P, Kumar SM. Prevalence and measurement of anterior loop of the mandibular canal using CBCT: A cross sectional study. *Clin Implant Dent Relat Res.* 2018;20(4):531-534.
25. Wahab PA, Madhulaxmi M, Senthilnathan P, Muthusekhar MR, Vohra Y, Abhinav RP. Scalpel versus diathermy in wound healing after mucosal incisions: A split-mouth study. *J Oral Maxillofac Surg.* 2018;76(6):1160-1164.
26. Kiran Mudigonda S, Murugan S, Velavan K, Thulasiraman S, Raja VK. Non-suturing microvascular anastomosis in maxillofacial reconstruction-a comparative study. *J Cranio-Maxillofac Surg.* 2020;48(6):599-606
27. Tucker CM, Desmond FF, Ivery P, Mack C, Aristizabal N. predicting health-promoting lifestyle and behavior among chronically ill Adolescents [Internet]. *PsycEXTRA Dataset.* 2006.