ORAL HEALTH PROFILE MAINTENANCE AMONG PATIENTS ATTENDING ISRA DENTAL COLLEGE.

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ABSTRACT... Objectives: To determine the oral health profile maintenance among patients attending Isra dental college Hyderabad. Study Design: Cross-sectional study. Setting: Oral pathology department of Isra University Hospital Hyderabad. Period: May 2017 February 2018. Material & Methods: All the patients either of gender presented at dental OPD with any oral health problem were included in the study. Clinical examination was done among all patients. All the patients interviewed regarding duration of disease and maintenance of oral health including type of tooth paste, frequency of tooth paste and timing of tooth paste. All the data was entered in the proforma and analysed by SPSS version 20. Results: Total 539 patients were studied; their mean age was 28.34±33.12 years. Females were found in majority 83.9%. Sensitivity was among 36.2% patients, need of filling was among 42.9% patients, need of scaling was among 31.7%. According to periodontal status, gums bleeding were in 13.2% patients, plaque formation was in 33.6% patients and calculus was in 10.0% patients. fluorosis was seen among 7.6% patients, malocclusion was in 13.7% patients, needs of Orthodontic treatment was in 14.7% patients and needs prosthodontics treatment was seen in 3.3% patients. According to oral health maintenance techniques Colgate, miswak and multiple tooth pastes uses were most common. Oral health status was insignificantly associated with frequency of oral health techniques, only needs of scaling was significantly higher among occasionally users of oral health techniques p-value 0.021. Conclusion: There was a lack of awareness amongst the people and their oral hygiene practice and dental visiting habits need to be addressed and modified.

Key words: Disease, Maintenance, Oral Health.

INTRODUCTION

Globally, oral infections are the major concern for public health and have a remarkable effect on people’s everyday social lives and health.¹

Globally, oral disorders influence 3.9 billion individuals.¹,² Worldwide, the most insecure are the deprived and poor people. Oral diseases have also become burden over Pakistani population. In Pakistan also less importance is given to oral health.³

The most common oral diseases are periodontal diseases and dental caries. Because of low importance given to oral health as well as oral health personnel scarcity i.e. oral health services scarcity to the population because 90% of the oral diseases are left untreated.³

Oral health implies to the state of having no facial and mouth pain, in addition to oral sores and infection, tooth loss, tooth decay, periodontal disease, throat or oral cancer, and further conditions, which restrict the abilities to speak, smile, chew, or bite, and adversely affect psychosocial health.⁴,⁵

Several systemic infections either arise in or could be inspected for in the buccal cavity at an initial stage, thus rapid development of the notion of systemic disorder screening and/or handling oral morbidity as a systematic disease manifestation in dental care.⁶
Pakistan faces major obstacles in terms of oral hygiene maintenance, as the majority of its people do not focus on improving oral health, is susceptible to addiction, has overlooked health problems, looking for self-medication, and often rural areas of residence, has limited healthcare access, which all makes people susceptible to bad oral health.

The objective of good oral health is to eliminate or avoid tartar and plaque formation, to prevent parodontal disease and dental caries, and to reduce halitosis incidence. Several surveys show that most individuals do not realize the significance of good oral health and its relationship with overall Well-being. Because of its high incidence and major mechanism of social effect, oral disorder can be regarded as public health issue. Dental caries (Tooth decay) is a much common oral disorder. By acting on the poor oral hygiene, cariogenic diet, and dental awareness, tooth decay can be prevented.

Few studies with small sample size has been found in literature. Therefore this big sample size study has been conducted to determine the oral health profile maintenance among patients attending Isra Dental College.

MATERIAL & METHODS
This cross-sectional study was conducted at the Oral pathology department of Isra University Hospital Hyderabad from May 2017 February 2018. All the patients either of gender presented at dental OPD with any oral problem were included in the study. Patients with diagnosis of oral cancer and those were not agree to participate in the study were excluded. All the patients were randomly selected and clinical examination was done among all patients to assess the oral health profile. All the patients interviewed regarding duration of disease and maintenance of oral health including type of tooth paste, frequency of tooth paste and timing of tooth paste. All the data was entered in the proforma and analysed by SPSS version 20. Frequency and percentage were calculated for qualitative variables and mean and SD were calculated for quantitative variables. Chi-square test was applied and p-value <0.05 was considered as significant.

RESULTS
Total 539 patients were studied. Mean age of patients was 28.34±33.12 years. Most common age group was 15-30 years. Females were found in majority 83.9% and males were 16.1%. Table-I.

Sensitivity was among 36.2% patients, need of filling was among 42.9% patients, need of scaling was among 31.7%. According to periodontal status, gums bleeding were in 13.2% patients, plaque formation was in 33.6% patients and calculus was in 10.0% patients. fluorosis was seen among 7.6% patients, malocclusion was in 13.7% patients, needs of Orthodontic treatment was in 14.7% patients and needs prosthodontics treatment was seen in 3.3% patients. Table-II.

According to oral health maintenance techniques Colgate, miswak and multiple tooth pastes uses were most common. Mostly patients were seen with one and twice using oral health maintenance techniques 52.3% and 37.8% respectively. 7.1% had history of thrice maintenance and 2.8% had history of oral health maintenance occasionally. Table-III.

Oral health status was insignificantly associated with frequency of oral health techniques, only needs of scaling was significantly higher among occasionally users of oral health techniques p-value 0.021. Table-IV.
## Variables

|                  | Frequency | Percent |
|------------------|-----------|---------|
| **Sensitive**    |           |         |
| Yes              | 195       | 36.2%   |
| No               | 344       | 63.8%   |
| **Need Filling** |           |         |
| Yes              | 231       | 42.9%   |
| No               | 308       | 57.1%   |
| **Need Scaling** |           |         |
| Yes              | 171       | 31.7%   |
| No               | 368       | 68.3%   |
| **Periodontal Status** |      |         |
| Bleeding gums    | 71        | 13.2%   |
| Plaque           | 181       | 33.6%   |
| Calculus         | 54        | 10.0%   |
| Normal           | 233       | 43.2%   |
| **Fluorosis**    |           |         |
| Yes              | 41        | 0.76%   |
| No               | 498       | 92.4%   |
| **Malocclusion** |           |         |
| Yes              | 74        | 13.7%   |
| No               | 465       | 86.3%   |
| **Need Prosthodontic Treatment** | | |
| Yes              | 18        | 0.33%   |
| No               | 521       | 96.7%   |
| **Need Orthodontic Treatment** | | |
| Yes              | 79        | 14.7%   |
| No               | 460       | 85.3%   |

### Table-II. Patient distribution according to oral health status n=539

| Oral Health Status | Frequency of Oral Health Techniques | Frequency | Percent |
|--------------------|-------------------------------------|-----------|---------|
| **Sensitive**      |                                     |           |         |
| Yes                | 101                                 | 76        | 15      | 3       | 195      | 0.573   |
| No                 | 181                                 | 128       | 23      | 12      | 344      |         |
| Total              | 282                                 | 204       | 38      | 15      | 539      |         |
| **Need Filling**   |                                     |           |         |
| Yes                | 119                                 | 90        | 13      | 9       | 231      | 0.372   |
| No                 | 163                                 | 114       | 25      | 6       | 308      |         |
| Total              | 282                                 | 204       | 38      | 15      | 539      |         |
| **Need Scaling**   |                                     |           |         |
| Yes                | 119                                 | 90        | 13      | 9       | 231      | 0.372   |
| No                 | 163                                 | 114       | 25      | 6       | 308      |         |
| Total              | 282                                 | 204       | 38      | 15      | 539      |         |
| **Periodontal Status** |                                 |           |         |
| Bleeding gums      | 34                                  | 34        | 2       | 1       | 71       | 0.935   |
| Plaque             | 91                                  | 74        | 10      | 6       | 181      | 0.176   |
| Calculus           | 25                                  | 24        | 4       | 1       | 54       |         |
| Normal             | 132                                 | 72        | 22      | 7       | 233      |         |
| Total              | 282                                 | 204       | 38      | 15      | 539      |         |
| **Fluorosis**      |                                     |           |         |
| Yes                | 20                                  | 17        | 4       | 1       | 42       | 0.935   |
| No                 | 262                                 | 187       | 34      | 14      | 497      |         |
| Total              | 282                                 | 204       | 38      | 15      | 539      |         |
| **Malocclusion**   |                                     |           |         |
| Yes                | 37                                  | 31        | 4       | 2       | 74       | 0.852   |
| No                 | 245                                 | 173       | 34      | 13      | 465      |         |
| Total              | 282                                 | 204       | 38      | 15      | 539      |         |
| **Need Prosthodontic Treatment** |                   |           |         |
| Yes                | 8                                   | 9         | 1       | 0       | 18       | 0.677   |
| No                 | 274                                 | 195       | 37      | 15      | 521      |         |
| Total              | 282                                 | 204       | 38      | 15      | 539      |         |
| **Need Orthodontic Treatment** |                      |           |         |
| Yes                | 38                                  | 33        | 4       | 4       | 79       | 0.401   |
| No                 | 244                                 | 171       | 34      | 11      | 460      |         |
| Total              | 282                                 | 204       | 38      | 15      | 539      |         |

### Table-III. Patient distribution according to types and frequency of toothpaste n=539

| Oral Health Maintenance Techniques | Frequency | Percent |
|------------------------------------|-----------|---------|
| Close-up                           | 07        | 1.3     |
| Colgate                            | 446       | 82.7    |
| Dentonic                           | 01        | 0.2     |
| Doctor                             | 06        | 1.1     |
| English                            | 03        | 0.6     |
| Forhen                             | 01        | 0.2     |
| Medicam                            | 09        | 1.7     |
| Miswak                             | 15        | 2.8     |
| Mr White                           | 03        | 0.6     |
| Multiple                           | 29        | 5.4     |
| Pepsoden                           | 04        | 0.7     |
| Sensodyne                          | 06        | 1.1     |
| Sparkle                            | 09        | 1.7     |
| Strawberry                         | 01        | 0.2     |
| Total                              | 539       | 100     |

### Table-IV. Patient distribution according to types and frequency of toothpaste n=539

| Oral Health Status | Frequency | Percent |
|--------------------|-----------|---------|
| Sensitive          |           |         |
| Yes                | 195       | 36.2%   |
| No                 | 344       | 63.8%   |
| Need Filling       |           |         |
| Yes                | 231       | 42.9%   |
| No                 | 308       | 57.1%   |
| Need Scaling       |           |         |
| Yes                | 171       | 31.7%   |
| No                 | 368       | 68.3%   |
| Periodontal Status |           |         |
| Bleeding gums      | 71        | 13.2%   |
| Plaque             | 181       | 33.6%   |
| Calculus           | 54        | 10.0%   |
| Normal             | 233       | 43.2%   |
| Fluorosis          |           |         |
| Yes                | 41        | 0.76%   |
| No                 | 498       | 92.4%   |
| Malocclusion       |           |         |
| Yes                | 74        | 13.7%   |
| No                 | 465       | 86.3%   |
| Need Prosthodontic Treatment |         |         |
| Yes                | 18        | 0.33%   |
| No                 | 521       | 96.7%   |
| Need Orthodontic Treatment |       |         |
| Yes                | 79        | 14.7%   |
| No                 | 460       | 85.3%   |

Professional Med J 2020;27(5):1074-1078. www.theprofesional.com
DISCUSSION
Oral health plays a pivotal role in the overall wellbeing and there is a variation in oral health status due to the changing trends and lifestyle. Mostly young population are involved in poor health maintenance. In this study mean age of patients was 28.34±33.12 years and females were in majority 83.9%. These findings were similar to Aggnur M et al as most common age group was 25-34 years and females were most common. Dawani N et al reported that males was 41.6% and females was 58.4%. Similar findings were reported by Narker JC et al. In this study sensitivity was among 36.2% patients, need of filling was among 42.9% patients, need of scaling was among 31.7%. On other hand Aggnur M et al reported that 80.4% patients' needs periodontal treatment for removal of calculus and scaling. In this study according to periodontal status, gums bleeding were in 13.2% patients, plaque formation was in 33.6% patients and calculus was in 10.0% patients. RIZVI KF et al reported that periodontal diseases as calculus was in 54% patients, gums bleeding in 8% and poor oral hygiene observed 72%.

In this study fluorosis was seen among 7.6% patients, malocclusion was in 13.7% patients, needs of Orthodontic treatment was in 14.7% patients and needs prosthetics was in 3.3% patients. Similarly RIZVI KF et al reported that Fluorosis was among 13% patients. Bhagavatula P et al reported that dental fluorosis 27.8%, which was higher as compared to this study.

In this study according to oral health maintenance techniques Colgate, miswak and multiple tooth pastes uses were most common. Hussain P et al reported that 31% people use brush and 20% Miswak, 6% use charcoal while 41% uses nothing to clean their teeth. Bangash MF et al reported that 23% individuals had history of miswak and 29% replied they using tooth brush for oral hygiene. In this study mostly patients were seen with one and twice using oral health maintenance techniques 52.3% and 37.8% respectively. Similarly Aggnur M et al reported that mostly of the patients 43.2% patients used brush once a day. Bangash MF et al stated that most of the study participants were using tooth brush once and twice daily. In this study oral health status was insignificantly associated with frequency of oral health techniques, only needs of scaling was significantly higher among occasionally users of oral health techniques p-value 0.021.

CONCLUSION
There was a lack of awareness amongst the people and their oral hygiene practice and dental visiting habits need to be addressed and modified. The present study emphasized the need of regular dental checkups and health education of people so sensitivity of teeth, tooth decay and periodontal problems due to poor oral hygiene can be addressed.

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| 5     | Sheba Ramzan        | Manuscript writing.        |                     |
| 6     | Shafqat Husain Khuwaja | Review of literature.  |                     |