PREVALENCE OF PERIODONTITIS IN PARAMEDICAL STAFF WORKING IN A MEDICAL COLLEGE.

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Abstract:
The present study was aimed at assessing the periodontal status of paramedical staff, the sample was of 91 male adults, data was collected by interview, examination was done to find the periodontal status.

Methodology: Written consent was taken. Demographic details were recorded, including age, gender, educational status and income. Age groups were stratified into 25-35 years, 36-45 years and 46-60 years. Educational level classified into illiterate or primary matric-Intermediate, graduate and above. Income groups were stratified as less than 10 thousand, 10 thousand to 20 thousand and 20 thousand and above. Examination was done, the attachment loss and pocket depth was recorded with the help of periodontal probe HU FRIEDY PCP 2 with 2-, 4-, 6-, 8-, 10-, 12mm graduation. It was positioned parallel to the long axis of the tooth at each site, bleeding from the gums was also recorded.

Result: Our results show that there were 91 male adults and average age range was 25-60 years. Periodontitis in age group 25 to 35 years was 62%, age group 36 to 45 years was 72%, and in age group 46 to 60 years was 88%. It was highest in old age.

When periodontitis was compared in the three groups according to income status, the periodontitis was 23%, 41%, 34% in staff getting salary less than 10 thousand, 10 to 20 thousand and more than 20 thousand rupees respectively.

When periodontitis was compared in the three groups according to educational status, the periodontitis was 64% in illiterate and primary educated, it was 40% in staff who were matriculate or inter pass, and periodontitis was 20% in graduate respectively.

Conclusion: periodontits is highly prevalent and is common in low income, less educated and older individuals.

Keywords: Periodontitis, Pocket Depth, Clinical Attachment Loss.

Introduction:
Periodontitis is chronic infection of hard and soft tissue supporting the teeth. The intensity of infection can be mild, moderate or severe depending on pocket depth, (PD) attachment loss (AL) and gingival inflammation around teeth.
In US the incidence of periodontitis is 47% of adults aged more than 30 years. Severe periodontitis was defined as having two or more interproximal sites with ≥6 mm attachment (not on the same tooth) and one or more interproximal sites with ≥5 mm pocket depth. Moderate periodontitis was defined as two or more interproximal sites with ≥4 mm clinical attachment (not on the same tooth) or two or more interproximal sites with pocket depth of ≥5 mm (not on the same tooth). Mild periodontitis was defined as two or more interproximal sites with ≥3 mm attachment and two or more interproximal sites with ≥4 mm pocket depth (not on the same tooth) or one site with ≥5 mm.
Periodontitis contribute extensively to the global burden of oral disease. The mild to moderate form of periodontitis is the most common with prevalence estimates ranging from 13-57% depending on sample characteristics and the case definition used.
More recently, goals for the year 2020 have been established jointly by FDI, WHO and International Association of Dental Research (IADR). These goals involve reducing impact of oral disease health and psychological development.
Little attention is given to periodontitis in developing countries. So a study was conducted to find out status of periodontitis in the paramedical staff of a medical college.

Material and Methods:
This study was conducted from July 2014-Dec 2014. The study was approved by the ethical committee. The study population included the paramedical staff working in Basic Medical Sciences, written consent was taken, and random sampling was done.

Inclusion criteria:
Paramedical staff either sex.
Age above 25 years.
Less than 60 years.
Not taking antibiotics.

Exclusion criteria:
Edentulous.
Workers less than 25 years more than 60.
Non consenting workers.

1. Operative dentistry trainee LUMHS
2. FCPS trainee AKU
3. Medical Technologist MMC
4. Professor Pharmacology MMC
**Methodology:**
Written consent was taken. Demographic details were recorded, including age, gender, educational status and income. Age groups were stratified into 25-35 years, 36-45 years and 46-60 years. Educational level classified into illiterate or primary matric-Intermediate, graduate and above. Income groups were stratified as less than 10 thousand, 10 thousand to 20 thousand and 20 thousand and above. Examination was done, the attachment loss and pocket depth was recorded with the help of periodontal probe HU FRIEDY PCP 2 with .2-.4-.6-.8-.10-.12mm graduation. It was positioned parallel to the long axis of the tooth at each site, bleeding from the gums was also recorded.

**Results:**
In our study the age range of study population was 25 to 60 years, they were all males and were divided according to their age groups educational qualification and income status, the age wise distribution is shown in table 1 and graph 1.

Periodontitis in age group 25 t0 35 years was 62%, age group 36 to 45 years was 72%, and in age group 46 to 60 years was 88%. It was highest in old age. When periodontitis was compared in the three groups according to income status, the periodontitis was 23%, 41%, 34% in staff getting salary less than 10 thousand, 10 to 20 thousand more than 20 thousand rupees respectively.

When periodontitis was compared in the three groups according to educational status, the periodontitis was 64% in illiterate and primary educated, it was 40% in staff who were matriculate or inter pass, and periodontitis was 20% in graduate respectively.

**Discussion:**
The study shows that periodontitis has got a very high prevalence (73%) individuals had periodontitis, lack of oral hygiene contributes towards its development and progression. Our study included only the male adults therefore we cannot report on the prevalence in female but many studies have reported preponderance in males, also reported by syed wali pirani. Our study also showed high incidence in workers whose income was less than 10 Thousand i.e (64%) the reason being not having oral health education, dearth of basic health care facilities and poverty. Our study also showed an inverse relation with educational status, the illiterate or primary educated individual having higher incidence of periodontitis this is in agreement with Borela et all. Periodontitis is directly proportional to age greater is the age higher is the incidence it was seen in 88%. In our study Periodontitis increases with age, it is directly associated with lower levels of education and higher level of poverty this is because they do not utilize the dental services. Smoking and diseases are other predisposing factors.

The report of surgeon General on Health Consequences of smoking infers a causal relationship between smoking and periodontitis.

**Conclusion:**
Our findings suggest that targeting interventions at high risk groups may be the most vital strategy to control and prevent periodontitis these include those with low educated men, rural residents and poor.

**Suggestions:**
Preventive dental care programs must be arranged and modifiable factors like smoking and diabetes control be addressed.
The dental surgeons must provide tobacco cessation counseling, educate persons on benefits of regular dental care.

**Table 1. Correlation of periodontitis in relation with age**

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>Total No:</th>
<th>Periodontitis Yes</th>
<th>% Yes</th>
<th>Periodontitis No</th>
<th>% No</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 to 35</td>
<td>26</td>
<td>16</td>
<td>62%</td>
<td>10</td>
<td>38%</td>
</tr>
<tr>
<td>36 to 45</td>
<td>39</td>
<td>28</td>
<td>72%</td>
<td>11</td>
<td>28%</td>
</tr>
<tr>
<td>46 and above</td>
<td>26</td>
<td>23</td>
<td>88%</td>
<td>03</td>
<td>12%</td>
</tr>
</tbody>
</table>

**Chart 1 from Table 1. Correlation of periodontitis in relation with age**

![Chart 1](image-url)
Table 2. Correlation of periodontitis in relation with salary

<table>
<thead>
<tr>
<th>Salary in rupees</th>
<th>Total No.</th>
<th>Periodontitis Yes</th>
<th>% Yes</th>
<th>Periodontitis No</th>
<th>% No</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10 Thousands</td>
<td>51</td>
<td>40</td>
<td>64%</td>
<td>11</td>
<td>36%</td>
</tr>
<tr>
<td>&gt; 10 Thousands</td>
<td>25</td>
<td>19</td>
<td>40%</td>
<td>06</td>
<td>60%</td>
</tr>
<tr>
<td>&gt;20 Thousands</td>
<td>15</td>
<td>05</td>
<td>34%</td>
<td>10</td>
<td>66%</td>
</tr>
</tbody>
</table>

Chart 2. Table 2. Correlation of periodontitis in relation with salary

Table 3. Correlation of periodontitis in relation with Education

<table>
<thead>
<tr>
<th>Educational status</th>
<th>Total No.</th>
<th>Periodontitis Yes</th>
<th>% Yes</th>
<th>Periodontitis No</th>
<th>% No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate to primary</td>
<td>51</td>
<td>31</td>
<td>60%</td>
<td>20</td>
<td>39%</td>
</tr>
<tr>
<td>Matric to inter</td>
<td>25</td>
<td>11</td>
<td>44%</td>
<td>14</td>
<td>56%</td>
</tr>
<tr>
<td>Graduate and above</td>
<td>15</td>
<td>03</td>
<td>20%</td>
<td>12</td>
<td>80%</td>
</tr>
</tbody>
</table>

Chart 3. From Table 3. Correlation of periodontitis in relation with Education

References:

10. Qi Zhang, wang cx, bao HL, shen T, Zhao YJ, Zhao WH. The status and distribution of three preventive oral health behaviors among adults in china. J Health


