Psychological Impact of Malocclusion among Teenagers

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ABSTRACT
Objective: The current study was aimed to assess the psychological impact in terms of self-esteem due to malocclusion among teenagers and to determine the incidence of severity of malocclusion among teenagers
Method: This was survey based descriptive crossectional study conducted in the department of orthodontics in a private dental teaching hospital of Lahore.
Results: Data was collected from the patients coming to orthodontic department for treatment. Sample size was 130 patients who required orthodontic treatment between ages ranging from 13 years of age to 18 years of age. Data was analyzed using SPSS version 25. Frequencies and percentages were calculated as descriptive statistic.
Conclusion: The occurrence and severity of dental malocclusions has an adverse psychological impact among teenagers.
Keywords: Dental Malocclusion, Psychological impact, Self-esteem, IOTN

INTRODUCTION
Nowadays, the importance of enhancing dento-facial esthetics is increasing rapidly making high orthodontic treatment demand. According to Hassebrauck, the second most significant component of face is a beautiful smile that attracts other when considering facial attraction. During orthodontic treatment, orthodontists carefully consider all facets of malocclusion, for instance, occlusion, esthetics, speech as well as mastication, but seeking orthodontic treatment is majorly aimed to have improved facial appearance. Literature supports that there is an impact of physical appearance on psychosocial prominence, particularly in teenagers as well as young adults. Furthermore, teenagers face peer pressure in terms of mocking as well as bullying but they may face social isolation in severe cases. Students’ facial attractiveness may affect the perception of teachers which later on impact the expectations from children and affect their assessment. It was reported that better positions is the again of being attractive in every stage of life. Therefore, psychical attractiveness resulted in positive experiences in society. Even though such associations are well approved, but direct relationship of malocclusion and its psychological impact is still scarce as it varies among communities.

The current study was aimed to assess the psychological impact in terms of self-esteem due to malocclusion among teenagers and to determine the incidence of severity of malocclusion among teenagers.

METHODOLOGY
This was survey based descriptive crossectional study conducted in the department of orthodontics in a private dental teaching hospital of Lahore. Data was collected from the patients coming to orthodontic department for treatment. Sample size was 130 patients who required orthodontic treatment between ages ranging from 13 years of age to 18 years of age.

After the ethical approval from the ethical committee of institution, parents of participants and participants were elaborated about the study and consent forms got signed from parents on patients’ behalf. Patients were evaluated according to the index of treatment need (IOTN) and who had requirement of treatment were inducted in the study. The index of treatment need (IOTN) rank patient according to the need of treatment ranging from 1 means no treatment required, 2 Mild/little treatment required, 3 means moderate treatment required, 4 means severe treatment required and 5 means extreme treatment required. Questionnaire was given to the participants to record their responses. The questionnaire has 2 portions, one was demographic part in which gender and age was asked and other part was based on 16 questions to evaluate their perception about smile and its impact on psychological level. Questions were rated on dichotomous responses; Yes or No. Data reliability was tested using Cronbach’s alpha which was .78. Data was analyzed using SPSS version 25. Frequencies and percentages were calculated as descriptive statistic.

RESULTS
Out of the entire data of 130, 46(35.38%) were males and 84(64.62%) were females. Data was segregated according to 2 age groups, 13-15 years age group included 62(47.69%) participants whereas 16-18 years age group included 68(52.31%)
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Data was segregated according to the IOTN divisions according to which mild/little treatment was required for 18.46% participants, moderate treatment was required for 31.54% participants, severe treatment was required for 35.38% participants and extreme treatment was required for 14.62% participants.

Table 1: Demographic data

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>46</td>
<td>35.38%</td>
</tr>
<tr>
<td>Female</td>
<td>84</td>
<td>64.62%</td>
</tr>
</tbody>
</table>

Table 2: Self-Perception about smile and its psychological impact

<table>
<thead>
<tr>
<th>Statements</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-confident about smiling</td>
<td>30(23.1%)</td>
<td>100(76.9%)</td>
</tr>
<tr>
<td>Putting hand while smiling over the mouth</td>
<td>85(65.4%)</td>
<td>45(34.6%)</td>
</tr>
<tr>
<td>Photograph better from one side of the face</td>
<td>82(63.07%)</td>
<td>48(36.93%)</td>
</tr>
<tr>
<td>Someone’s smile is better</td>
<td>91(70%)</td>
<td>39(30%)</td>
</tr>
<tr>
<td>Looking at magazines while wishing to have a pretty smile like models</td>
<td>92(70.8%)</td>
<td>38(29.2%)</td>
</tr>
<tr>
<td>While reading fashion magazine, getting attracted to smile of models</td>
<td>86(66.2%)</td>
<td>44(33.8%)</td>
</tr>
<tr>
<td>Pointing out defects in gums or teeth, looking in the mirror while</td>
<td>97(74.6%)</td>
<td>33(25.4%)</td>
</tr>
<tr>
<td>Whiter teeth are required</td>
<td>81(62.3%)</td>
<td>49(37.7%)</td>
</tr>
<tr>
<td>Level of satisfaction with the gums appearance</td>
<td>47(36.2%)</td>
<td>83(63.8%)</td>
</tr>
<tr>
<td>While smiling, too few or too many teeth appear</td>
<td>86(66.2%)</td>
<td>44(33.8%)</td>
</tr>
<tr>
<td>While smiling, too few or too many gums appear</td>
<td>89(68.5%)</td>
<td>41(31.5%)</td>
</tr>
<tr>
<td>Too short or too long teeth</td>
<td>84(64.6%)</td>
<td>46(35.4%)</td>
</tr>
<tr>
<td>Too narrow or wide teeth</td>
<td>97(74.6%)</td>
<td>33(25.4%)</td>
</tr>
<tr>
<td>Too round or square teeth</td>
<td>81(62.3%)</td>
<td>49(37.7%)</td>
</tr>
<tr>
<td>Shape of the teeth are satisfactory</td>
<td>47(36.2%)</td>
<td>83(63.8%)</td>
</tr>
<tr>
<td>Feeling of confidence while smiling in gathering</td>
<td>29(22.31%)</td>
<td>101(77.69%)</td>
</tr>
</tbody>
</table>

In conclusion, the occurrence and severity of dental malocclusions has an adverse psychological impact among teenagers.

REFERENCES