INTRODUCTION: Trauma to the anterior teeth, which having various harmful sequelae, also can damage one’s self-esteem and confidence.

AIM: To document the prevalence of traumatized anterior teeth among adolescents in Ghaziabad District, Uttar Pradesh, India

MATERIALS AND METHODS: Patients aged between 12-19 years were screened for traumatic injuries to their anterior teeth were selected as study subjects and their type of fracture was recorded according to the standard questionnaire from Oral Health Survey WHO format 2013. Apart from Descriptive statistics, the t-test and Odd’s Ratio (OR) was calculated for statistical analysis.

RESULTS: The prevalence of trauma was found out to be 16.10 % while most anterior trauma was seen in adolescents aged 18-19 (105) years, followed by 12-15 years (101) and 16-17 Years (87). The highest fracture was enamel only and males were more affected than females. The maximum trauma was attributed to Accidents (103,37.2%) followed by fall (94, 32.1%) and this was statistically significant

CONCLUSION: There is a need for patient education in Ghaziabad District to treat their fractures, lest it leads to further dental complication, apart for being aesthetically unpleasant.

KEYWORDS: Trauma, Fracture, Anterior, Teeth
Patients who were undergoing any type of orthodontic treatment, mentally challenged, suffering from any systemic disease and not willing to participate in the study were excluded from the study.

An ADA type III examination under artificial light while the patient was sitting in the clinical chair was carried out. After obtaining informed consent, the anterior tooth fractures were documented in a standard questionnaire from Oral Health Survey WHO format 2013 whose scoring criteria is depicted in Table 1.

### Statistical Analysis
The data was entered in Microsoft excel wherein descriptive data was analyzed. For statistical comparisons, the student’s t-test was applied for comparisons along with calculation of the Odds’ Ratio (OR).

### RESULTS
Figure 1 depicts the patients screened from whom, the sample of those having anterior tooth trauma was obtained. It was seen that a total of 1819 adolescents were screened, 293 (16.10%) suffered from Anterior tooth trauma.

The distribution of the study group according to age is shown in Table 2. Most anterior trauma was seen in children aged 18-19 (105) years, followed by 12-15 years (101) and 16-17 Years (87). The presence of anterior trauma among adolescents aged 12-15 was proven to be significant in comparison to the ones without any trauma in the same age group (p=0.001).

### DISCUSSION
The present study, with the aim to document the prevalence of traumatized anterior teeth among...
adolescents in Ghaziabad District, Uttar Pradesh screened a total of 1819 adolescents, of which 293 (16.1%) were found to be suffering from anterior trauma. This finding is lower in comparison to Teixeira et al. (34.97%, Brazil)\textsuperscript{11} and Sgan-Cohen et al. (33.8% Israel)\textsuperscript{12}, higher as compared to Noori and Al-Obaidi (6.1%, Iraq)\textsuperscript{13} and in agreement to Baldava P et al. (14.9%, India).\textsuperscript{14} Such differences in prevalences could be attributed to different practices among people living across the globe. Also, the motivation and attitudes for dental treatment could also vary as per their customs, traditions and the accessibility of dental services.

Among all fractures, Males(176, 9.67%) were seen to be more affected as compared to females (117, 6.43%) and this difference was found to be non-significant. This is in agreement with a number of researchers who document a higher prevalence of fractures among males.\textsuperscript{15}-\textsuperscript{17} The reason for such a difference could be due to lesser involvement of females in activities that makes their teeth more prone to fracture.

In the present study, the maximum trauma was attributed to Accidents (103, 37.2%) followed by fall (94, 32.1%) and the results agree with Bendoand et al. (43.6% trauma from falls, Brazil)\textsuperscript{18} and Altun et al, Turkey (40.03% Trauma from Falls, Turkey).\textsuperscript{19} At this age, it can be speculated that an adolescent’s mind is pre-occupied with many other things that can increase his/her chances of falling.

Enamel Fracture only (score 2, 147, 50.17%) was the most prevalent fracture seen in the present study, and is in agreement with Navabazam A et al.\textsuperscript{20} and Dua R et al(50%).\textsuperscript{4} This study hence, solves its purpose of providing exploratory data on the prevalence of trauma to anterior teeth and provides the path for more studies and treatment based campaigns in this region.

CONCLUSION

The percentage of population suffering from trauma to anterior teeth in Ghaziabad District is on the higher side and combined efforts are required to motivate the
patients to get their treatment done to avoid any further complications.

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