

REVIEWER'S REPORT

Manuscript No.: JNHM- 168

Title: Prevalence of traumatic injuries in permanent teeth in relation to age, gender and predisposing factors among 6-12 age school children in AL Najaf city,

Recommendation:

Accept after minor revision

Rating	Excel.	Good	Fair	Poor
Originality			✓	
Techn. Quality			✓	
Clarity		✓		
Significance	✓			

Reviewer's Name: Bilqees Hamza

Detailed Reviewer's Report

This cross-sectional epidemiological study investigated the prevalence, predisposing factors, and clinical patterns of traumatic dental injuries (TDIs) in permanent anterior teeth among 600 primary school children aged 6–12 years in Al Najaf city, Iraq. The study population comprised an equal distribution of sexes (300 males and 300 females) sampled from both public and private schools. Data collection relied on standardized clinical examinations utilizing disposable dental mirrors, Williams probes, and cotton pellets under artificial lighting to categorize injuries according to the Ellis and Davey classification system.

The overall prevalence of TDI identified in the study sample was 6.67% ($\$n = 40\$$). When stratified by age, younger children aged 6–9 years exhibited a higher trauma prevalence (8.20%) compared to older children aged 10–12 years (5.52%). Sex distribution analysis revealed a slightly higher frequency of TDI among females (7.38%) than males (5.96%), although this difference was not statistically significant. In terms of injury severity, Ellis Type II (enamel-dentin fracture without pulp involvement) was the most common presentation, accounting for 27.50% of affected cases, followed by Type III (25.00%), Type I (20.00%), Type IV (17.50%), and Type V (10.00%).

Regarding etiology, falls constituted the predominant cause of injury across the sample, accounting for 50.00% of cases, followed by sports activities (30.00%), acts of violence (15.00%), and traffic accidents (2.50%). A statistically significant association was observed between the specific cause of trauma and the resulting trauma type ($\$p = 0.005\$$). Falls were most frequently associated with Types I, II, and IV

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trauma, sports activities were the primary driver of Type III trauma (60.00%), and violence was exclusively linked to Type V trauma (100.00%).

Anatomically, the maxillary right central incisor was the most frequently traumatized tooth, presenting in 100% ($n = 40$) of injured subjects, followed by the maxillary left central incisor (27.50%) and the maxillary right lateral incisor (7.50%). Despite the high occurrence of structural damage, a substantial treatment gap was identified: only 9 of the 40 injured children (22.50%) had received professional dental treatment, leaving 77.50% of TDI cases untreated. Untreated trauma was higher among males (83.33%) than females (72.73%), though this variation was not statistically significant.

The authors concluded that TDIs are notably present among primary school children in Al Najaf, particularly among younger age groups, with falls serving as the primary etiology. The high proportion of untreated cases underscores an urgent public health need for targeted educational campaigns, preventive strategies against falls and sports injuries, and enhanced access to pediatric dental care to mitigate physical and psychosocial complications.

Suggested Improvements

To bring this manuscript up to a publishable academic standard, several critical errors, structural formatting issues, and methodological limitations must be addressed:

1. Correction of Corrupted and Inverted Text

- **Methodology Text Errors:** In the "Materials and method" section, lines 83–85 and 89–94 contain severe text corruptions where sentences are printed in reverse order (e.g., "*lacinilc dna eriannoitseuq gnisu detcudnoc saw yduts lanoitces-ssorc A...*" and "*loohcs tnevnrevog dna etavirp eht ni enod saw...*"). All corrupted text must be fully un-reversed and rewritten into clear, grammatically correct English.

2. Rectification of Data Inconsistencies and Table Errors

- **Age Group Categorization Errors:** In Table 5, the age categories are listed as 5–9y and 10–14y. This directly contradicts the study's specified inclusion criteria of 6–12 years. The age brackets in Table 5 must be corrected to 6–9y and 10–12y to maintain consistency with Tables 1–4 and 6.
- **Table Percentage Calculations:** Check the percentage calculations in Table 7 for accuracy. For example, under Type II trauma, 1 case out of 11 is labeled as 9.09% in the text, but the column layout must be re-aligned to ensure that numbers and percentages correspond accurately across all rows.

3. Expansion of Study Limitations and Methodology

- **Impact of Diagnostic Omissions:** The authors note that neither dental pulp vitality testing nor radiographic examinations were conducted due to field examination constraints. This limitation

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must be thoroughly discussed in the "Discussion" section, as visual inspection alone cannot reliably detect subtle root fractures, pulp necrosis, or periapical pathology associated with Type IV and V injuries.

- **Elaboration on Sampling Strategy:** The sampling procedure needs clearer explanation. Specify how many total primary schools exist in Al Najaf, how the two private and three public schools were selected, and how random selection was applied within classrooms to ensure representative sampling.

4. Grammar, Terminology, and Formatting Revisions

- **Terminology Standardization:** Correct informal or inconsistent phrasing throughout the manuscript. Change phrases like "*12 old girl*" to "*A 12-year-old girl*" in figure captions, replace "*TDA*" with the standard abbreviation "*TDI*" (lines 218, 228), and correct typos such as "*is is*" (line 234).
- **Abstract Alignment:** Ensure that the abstract accurately reflects the statistical findings presented in the main text. For instance, line 17 states that treatment rates were "*higher than male*" among females, but the main text and Table 6 show no statistically significant association ($p = 0.476$); the abstract should explicitly clarify that this difference was not statistically significant.

Final Acceptance Matrix

Decision: Accept Pending Minor Revisions