



Prevalence of Malocclusion Most of the Population in Luxor City of Egypt

Nour Salar Ahmed*

Department of Dentistry, Private Practice Dentist - Luxor City, Egypt

Abstract

Background: Malocclusion is identified as one of the most common dental troubles affecting young adults and formative years globally. Oral capabilities and facial aesthetics are influenced through the severity of malocclusion and it's of excellent problem to the individual, their households and health authorities as well. Most of the reported studies for the Egypt are from the eastern, southern and central regions. To the exceptional of our knowledge, no records are available for the northern vicinity of Luxor; consequently the goal of this look at turned into to determine the superiority of malocclusion many of the population of Luxor city.

Methodology: Descriptive take a look at having a cross-sectional look at, a convenient pattern length of 504 Egypt populations among the age group of 13 to 50 years. Informed consent became taken from the participants before carrying out the examination, parents consent turned into searched for children. Malocclusion changed into recorded as defined through WHO, oral health Survey, and simple methods. Each issue was examined for the kind of malocclusion in keeping with Angle's classification.

Results: Most major malocclusions became Angles Class I 41.7% in women and 26.2% in males. The 15.4% adult males and 23.3% adult males had excessive overjet (<2 mm) as compared to 38% adult males and (24.3%) girls who had reduced overjet (<2 mm) while 32.3% men and 20.5% males had reduced overbite.

Keywords: Dental health; Malocclusion; Prevalence; North; Luxor; Egypt

Introduction

Malocclusion has a notable impact on patient self-self assurance and oral health; it's a critical oral health concern after gingival disease, dental caries, and dental fluorosis [1]. The understanding of different styles of malocclusion is useful for growing an accurate treatment plan [2-5]. Oral capabilities and facial aesthetics influenced by means of the severity of malocclusion and it's inordinate to health authorities and people tormented by it as [3-9].

In 1899 attitude categorized the malocclusion consistent with the position of the lower permanent first molar to the upper everlasting first molar. In elegance I (normal) the Mesio Buccal (MB) cusp of higher everlasting first molar occluded on Mesio Buccal (MB) groove of lower everlasting first Molar Class II MB cusp of higher permanent first molar occluded anterior to MB groove of decrease permanent First Molar Class II can be subdivided to two division, department 1 were the upper incisor is proclined and overjet increase, department 2 changed into the higher incisor retroclined and the overjet became decreased. Class III MB cusp of upper everlasting first molar occluded posterior to MB groove of lower permanent first [3]. Three dimension issues and variations of malocclusion in the same distomesial occlusion of buccal teeth and recognized the relationship of teeth to facial profile, these kind of issue attitude structures did not display it. In a lot of these deficiencies the angle device still uses in instructional settings and studies [4]. The dentists estimate the orthodontic trouble and its treatment need by inspecting occlusal capabilities that if left without intervention treatment it's going to exacerbate useful impairment and aesthetic problems [5,6]. Incisor's classification may be restricted at some point of the following: Class I while the mandibular incisor side occluded immediately below the maxillary incisors in the cingulum plateau. Class II when the mandibular incisor area occluded posterior to the cingulum plateau of maxillary incisors, may be subdivided to division I the maxillary anterior enamel are proclined so one can result in increase overjet, division II the maxillary anterior tooth are retroclined with the intention to lead to lower overjet. Class III while the mandibular incisor facet occluded anterior

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*Correspondence:

Nour Salar Ahmed, Department of Dentistry, Private Practice Dentist - Luxor City, Egypt, Tel: 12398765432; E-mail: Noorsalar.1@outlook.com

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to the cingulum plateau of maxillary incisors the overjet will have negative price/lessen or reversed [7]. Both right and left side of dog can be scored as: Class I dog relation whilst the top canine occluded inside the embrasure of lower dog and premolar Class II dog relation when the top dog occluded anterior to the embrasure of decrease canine and premolar Class III dog relation whilst the higher canine occluded posterior to the embrasure of lower canine and premolar [10-15]. Overbite is while decrease incisors are vertically overlapped by using upper central incisor, the everyday fee of overbite 1/3 of decrease incisor. While overjet is the duration from the labial floor of the upper incisor to labial floor of the decrease incisor. The normal fee of overjet 2 mm to 4 mm [16-22].

Materials and Methods

An observational descriptive observe having a cross-sectional design. Non-possibility handy sampling technique changed into used. The present examine blanketed a pattern of 504 respondents of the Saudi populace between the ages organization of 13 to 50 years. The study duration was more than a year from January 2017 to May 2018. People who underwent orthodontic treatment, and those who had any missing enamel or with any sort of systemic diseases, that include developmental anomalies, which include ectodermal dysplasia, cleft lip or palate, and down syndrome, had been excluded from the have a look at. Written Informed consent becomes taken from the participants before conducting the examination, parent’s consent turned into hunted for children. The exam was achieved in a dental chair underneath fixed artificial illumination and malocclusion became recorded as described through WHO, Oral health Survey, and basic techniques *via* the use of Community Periodontal Index (CPI) probe and undeniable mouth mirror [23-31]. Each concern changed into examined for the type of malocclusion in line with Angle’s classification for Class I, Class II Div I, Class II Div II, Class III molar relation, anteriorly canine, and incisal relation based at the under mentioned guidelines. Horizontal determinants for overjet: Normal (1 nm to 2 mm), excess (<2 mm), reduced (Diminished (<1 mm), edge to edge (0), reverse overjet or anterior crossbite (<0) Vertical determinants for overbite: Normal (1 nm to 2 mm) excess (>2 mm), reduced (<1 mm) open nibble. Information was shown as

number and rate [32-38].

Results

Out of 504 members, 61.3% were females and 38.7% were guys. The majority of the patients had a place with 20 to 29 years old (41.7%). Results demonstrated that the most dominating malocclusion arranged by commonness was Angle's Class I (41.7%) in females and (26.2%) in guys, Angle's Class II Div I (5.2%) in females and (3.2%) in guys, Angle's Class II Div II (2.2%) in female and (2.6%) in guys, Angle's Class III (12.3%) in female and (6.7%) in guys. Most of the populace both male and female had ordinary overbite (39% and 49.6%) and typical overjet (48.7% and 61.5%) individually. Though (15.4%) guys and (23.3%) females had exorbitant overjet (>2 mm) contrasted with (38%) guys and (24.3%) females who had decreased overjet (2 mm) while (32.3%) guys and (20.5%) females had diminished overbite (<1 mm), the front crossbite was accounted for in (5.6%) males and (1.3%) females and open nibble in (5.6%) guys and (5.55%) females.

Discussion

The consequences of the investigation infer that, First, the commonness of malocclusion in Egypt, especially in the city of Luxor, is high. Also, the most well-known type of malocclusion is class I as indicated by Angel's characterization. Third, the malocclusion in ladies is to some degree more articulated than in men, yet this distinction isn't basic. At long last, it is important to take note of that class I frequently happens in individuals matured 20 to 29 years. In such manner, the dental exploration led in the city of Luxor shows that 342 (68%) out of 504 individuals have class I malocclusion. It is a normal outcome, as past examinations additionally bolster such information. These outcomes are in concordance with comparable examinations directed in the focal, northern outskirts and western district of Saudi Arabia [3-11]. In any case, the past investigations didn't cover the Luxor Region, so the outcome got in this undertaking gives an increasingly nitty gritty image of the predominance of class I malocclusion in the Luxor region. Al Edafi proposed that the etiology of malocclusion may identify with hereditary or natural components, for example, heredity, environmental change, or others. Be that as it

Table 1: Showing the molar relation.

Tooth	Class I		Class II Div i		Class II Div ii		Class III		Total
	Male N (%)	Female N (%)	Male N (%)	Female N (%)	Male N (%)	Female N (%)	Male N (%)	Female N (%)	
Gender									Total N (%)
Molar	132 (26.2%)	210 (41.7%)	16 (3.2%)	26 (5.2%)	13 (2.6%)	11 (2.2%)	34 (6.7%)	62 (12.3%)	504 (100%)

Table 2: Displaying the canine relation both right and left sides.

Tooth N	Class I		Class II		Class III		Total
	Male N (%)	Female N (%)	Male N (%)	Female N (%)	Male N (%)	Female N (%)	
Gender							
R canine	138 (27.4%)	208 (41.3%)	34 (6.7%)	66 (13.1%)	23 (4.6%)	35 (6.9%)	504
L canine	216 (42.9%)	138 (27.4%)	28 (5.6%)	62 (12.3%)	29 (5.8%)	31 (6.2%)	504

Table 3: Showing the overjet and overbite relation in anteriors.

Gender	Male N (%)	Female N (%)	Gender	Male N (%)	Female N%
Edge to edge	4 (2.1%)	5 (1.6%)	Edge to edge	4 (2.1%)	6 (1.9%)
Less than 2 mm	74 (38%)	75 (24.3%)	Less than one third	63 (32.3%)	62 (20.5%)
2mm to 4 mm	76 (39%)	153 (49.6%)	One third	95 (48.7%)	190 (61.5%)
More than 4 mm	30 (15.4%)	72 (23.3%)	More than one third	22 (11.3%)	34 (11%)
Reverse overjet	11 (5.6%)	4 (1.3%)	Open bite	11 (5.6%)	17 (5.5%)
Total	195	309	504	195	309

may, Baeshen, through near portrayal, has indicated that malocclusion is less regular in creating nations, while it is progressively normal for created areas [34]. The seriousness of this sort of malocclusion can be ascribed to the eccentricities of ethnic qualities, just as to the development of urbanization in the locale, which infers a progress of individuals to an alternate nature of food and way of life. Specifically, when biting delicate and prepared nourishments, the jaws are feeling the squeeze than nature requires [11]. In such manner, specialized advancement and the development of the financial status of occupants of Luxor Region might be factors that lead to an articulated sign of the malocclusion (Table 1). The seriousness of impediment by sex attributes. Among members with malocclusion of class I, female delegates are uncritically pervasive. As indicated by the information acquired, 210 ladies and 132 men have this sort of malocclusion. The outcomes are significant for the dental determination of the occupants of Luxor since some past examinations have watched a huge factual contrast between the requirements for orthodontic treatment of ladies and men. For instance, the examination led in the eastern region of Egypt and Libya has indicated that ladies experience the ill effects of malocclusion frequently [9-12]. In such manner, the information on the city of Luxor affirms the requirement for customary assessment and orthodontic treatment in the two sexual orientations. A significant quality of this examination is the arrangement of impediment by the sagittal proportion of teeth. Specifically, it has been uncovered that the privilege and left molars of the members, just as their canines, compare to the ordinary class I (Table 2). The investigation has likewise uncovered a more noteworthy variety in the examination of the cover of incisors. The most widely recognized typical cover is 2 mm to 4 mm (in 153 ladies and 76 men). The following biggest marker is overjet less than 2 mm. This proportion has been found in 75 ladies and 74 men. Additionally, it tends to be seen while assessing the proportion of overjet of in excess of 4 mm. For this situation, it is progressively articulated in females (72 ladies and 30 men). It is important to take note of that such a deformity is progressively articulated in the male sexual orientation delegates, as indicated by the data got. A backwards relationship can be seen while assessing the proportion of opposite overjet (11 men and 4 ladies) (Table 3). The score of overbite shows that most members have a cover of 33%, which is the standard. In any case, the examination has discovered that the following most significant outcomes are short of what 33% and more than 33%. Age attributes: Among the members in this examination, the most elevated recurrence of malocclusion has been found in individuals matured 20 to 29 years. This marker additionally assumes a significant job since past dental examination for the most part influenced the youthful gathering and distinguished anomalies among its delegates [30]. Be that as it may, as this investigation appears, the most defenseless gathering is youngsters under 29 years of age. Most likely, this outcome is a result of the way that impediment issues are handily rectified in youth and youthfulness, while the treatment of malocclusion at a more established age is a significant troublesome undertaking. Al Qarni reaches comparative inferences in their examination. The aftereffects of the assessment directed by them have additionally uncovered the centralization of malocclusion among members matured 21 to 25 years. The specialists recommend that the explanation behind this circumstance is an increasingly mindful disposition of the more youthful age gathering to the condition of their teeth. That is, the creators expect that teenagers and youngsters younger than 20 give a lot of consideration to their appearance, specifically, to the grin and the state of their countenances. Thus, an inappropriate nibble can altogether debilitate

the outer style and balance of the face. Hence, youngsters are bound to look for orthodontic treatment. In such manner, the examination has demonstrated that malocclusion is a regular orthodontic issue of the occupants of the city of Luxor. In spite of the way that its appearance is for the most part restricted to class I, the irregular nibble is as yet a pathology requiring intercession. In the event that untreated, it might get one of the components inciting the improvement of various neurotic procedures in the body, one of which is caries [31]. Furthermore, malocclusion can prompt an adjustment looking like the face, lost its balance, tasteful deformities, and hindered outward appearance.

Conclusion

Inside the constraints of this examination, it was presumed that the greater part of the investigation members showed Angles class I occlusal highlight with typical overjet and overbite, which is as per other revealed reads for the realm. It is recommended to gather information from all the regions in the Luxor area to assess the treatment needs of the populace.

References

1. Siddiqui AA, Khan RS. Dental anxiety and fear: What are the best evidence-based measure to avoid it? *J Dent Oral Sci.* 2019;1:1-2.
2. Amin J, Siddiqui AA, Amin S. Ergonomics, exercises, and education to prevent neck and back pain among dentists. *J Dent Oral Sci.* 2019;1:1-3.
3. Alshammari DS, Mian RI, Al Zubaidi S, Alshammari NS, Alenezi AS, Albaqawi SK, et al. Prevalence of malocclusion among the Saudi population in Ha-il city of Saudi Arabia. *J Dent Oral Sci.* 2019;1:1-7.
4. Emmanuel AA, Abiose OB, Gbolahan OO. Changing pattern of intra-alveolar extraction in the southwest Nigeria. *J Dent Oral Sci.* 2019;1(1):1-7.
5. Firdose N. Nyer zet-ractor-innovative multifunctional concept of retraction. *J Dent Oral Sci.* 2019;1(1):1-5.
6. Singh T. Editor Note. *J Dent Oral Sci.* 2019.
7. Al-Bodbaij MH, Al-Obaid J, Al-Marzooq Y, Al Ameer IA. Intralesional steroid treatment of aggressive central giant cell granuloma of the mandible. *J Dent Oral Sci.* 2019;40(3):1-7.
8. Maksoud M, Ahmed A, Guze K. Accelerated soft and hard tissue healing in extraction sockets augmented with bone allograft and amnio-fluid, clinical and histological report of ten cases. *J Dent Oral Sci.* 2019;1(2):1-6.
9. Mahajan A, Singh K, Negi M, Rayast D. Predictability of modified Miller's classification in assessing the treatment outcomes of gingival recession defects-a case series. *J Dent Oral Sci.* 2019;1(2):1-8.
10. Stoeckl G, Wrbas T. Endodontic treatment of two maxillary incisors with dens invaginatus. *J Dent Oral Sci.* 2019;1(2):1-13
11. Friman G, Hultin M, Nilsson GH, Wardh I. Seven-year follow-up of screening for hypertension and diabetes at a dental clinic. *J Dent Oral Sci.* 2019;1(2):1-13.
12. Thakur N, Mahajan A, Ghetza K. Ankyglossia among population of north India-A prevalence pilot study. *J Dent Oral Sci.* 2019;1(2):1-5.
13. Paul P, Sameera U, Geetha K, Bilichodmath S. Antimicrobial property of lemongrass oil against porphyromonas gingivalis. *J Dent Oral Sci.* 2019;1(2):1-12.
14. Ashour YY, Bakry SI, Abdelkadr SH, Elabbasy F. Evaluation of marginal fit of two types of glass ceramics (*In Vitro* study). *J Dent Oral Sci.* 2019;1(3):1-11.
15. Metin R, Tatli U. An unexpected complication after use of pedicled buccal fat pad for closure of oroantral fistulae: Emphysema. *J Dent Oral Sci.* 2019;1(3):1-8.

16. Manjunath RGS, Karthikeyan SS. The link between fingerprints, genetics & chronic periodontitis: A dermatoglyphic study. *J Dent Oral Sci.* 2019;1(3):1-10.
17. Robo I, Heta S, Karkanaq L, Ostreni V. HBOT application at cases of gingival inflammation. *J Dent Oral Sci.* 2019;1(3):1-16.
18. Rosa de Carvalho RT, Turssi CP, Zanin L, Florio FM. Prevalence and factors associated to dental erosion in 12-year-old school children from the city of Joacaba (SC-Brazil). *J Dent Oral Sci.* 2019;1(3):1-11.
19. Lin K, Takesh T, Lee JH, Duong DN, Nguyen AH, Cheung RK, et al. Effects of a dental gel over 6 months on periodontal health in subjects with stage II and III (Mild and Moderate) periodontitis. *J Dent Oral Sci.* 2019;1(3):1-10.
20. Gandluru RV. Identification of carotid artery calcifications on digital panoramic radiograph in a group of south Indian population: A retrospective study. *J Dent Oral Sci.* 2020;2(1):1-16.
21. Said AM, Zohdy MMM, Morsy TSED. The effect of aging and surface treatments on micro-shear bond strength of resin nano-ceramic material using two resin cements. *J Dent Oral Sci.* 2020;2(1):1-14.
22. Maraghy MAR, Zohdy MM, Wahsh MM. Degree of conversion of light cured resin cements polymerized under two thicknesses of different lithium silicate ceramics. *J Dent Oral Sci.* 2020;2(1):1-12.
23. Magallon HCM, Alonso DHS, Zaragoza DER, Valdiosera FEC. Low-level laser therapy as a coadjuvant in sodium hypochlorite extrusion management. *J Dent Oral Sci.* 2020;2(1):1-10.
24. Ekaniyere EB. Effect of surgical versus pharmacological decompression of Ludwig's angina on airway compromise among Nigerian patients. *J Dent Oral Sci.* 2020;2(1):1-8.
25. Alyafei NA. Analysing the attitudes of Qatari people toward oral health instructions. *J Dent Oral Sci.* 2020;2(1):1-9.
26. Hassan HA, Emera RMK, Ahmed WS, El-Mekawy N. Evaluation of implant over denture retention with two different attachments at 23 mm standard inter-implant distance. *J Dent Oral Sci.* 2020;2(2):1-9.
27. AL-Zamzami AA. Carcinoma of the facial skin among Yemenis: A prospective hospital based-study. *J Dent Oral Sci.* 2020;2(1):1-10.
28. Harfosh AA, Abdelkahlek MM, El Sherifa TM. Nano-hybrid versus micro-hybrid composite as reinforced resin for ribbon bar attachment. *J Dent Oral Sci.* 2020;2(2):1-10.
29. Malhotra S, Sirohi R. COVID-19 after math - A oral health care provider prospective. *J Dent Oral Sci.* 2020;2(2):1-4.
30. Rajaraman V, Velayudhan A. Full mouth fixed rehabilitation of a young adult with ectodermal dysplasia: Making mountain out of a molehill in the literal sense. *J Dent Oral Sci.* 2020;2(2):1-4.
31. Halwani MAM, Almuzaini NHM, Alkhalaf ASH, Almassri OAF, Al-Najdi LNM, Alshehri SMH. Clinical study - The facial skin beauty and oral mucosa changes due to effect of local anesthesia per oral surgery. *J Dent Oral Sci.* 2020;2(2):1-13.
32. Coria-Valdiosera FE, Rodriguez-Zaragoza DE, Ruiz-Reyes H. Persistent apical periodontitis: Bacterial taxonomic analysis and treatment through intentional replantation. *J Dent Oral Sci.* 2020;2(3):1-12.
33. Farista S, Qadri Nadeem SSA, Chaudhary A, Farista S, Manohar B. Closed flap osseous crown lengthening procedure. *J Dent Oral Sci.* 2020;2(3):1-10.
34. Deshpande M, Jain D, Mehta S, Bhat D, Gambhir L, Patel R, et al. Orthodontic care in pediatric cancer survivors: A review. *J Dent Oral Sci.* 2020;2(3):1-6.
35. Reddy V, Lakshmi V. Autism spectrum disorder: Essentials for a dental expert. *J Dent Oral Sci.* 2020;2(3):1-4.
36. Kambalimath DH, Kambalimath HV. A rare case of congenital missing mandibular second molar: Report and review of literature. *J Dent Oral Sci.* 2020;2(3):1-11.
37. ELshaboury SN, Mahanna FF, Ahmed WS, EL Waseef FA. Cobalt chromium vs. peek for reinforcing single implant mandibular overdentures: A clinical study of strain analysis. *J Dent Oral Sci.* 2020;2(3):1-12.
38. Sikri J, Sikri A. 3D Endodontics: The Future of Dentistry. *J Dent Oral Sci.* 2020;2(3):1-2.