

An Audit of Oral Hygiene Maintenance among Orthodontic Patients in Benghazi

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Received: December 26, 2017; **Published:** February 05, 2018

Abstract

Aim: Orthodontic patients specially treated with fixed appliance are more susceptible to dental caries and periodontal problem because of the appliance bonded on the teeth. The aim of this study was to evaluate the oral hygiene maintains of orthodontic patient and if they were following to instructions of their orthodontist to avoid the adverse effect of orthodontic treatment.

Materials and Methods: A questioner was distributed to a total number of 50 (8 males and 42 Females) orthodontic patients, 18 were from private orthodontic clinic of Benghazi dental center and other 32 from orthodontic department in faculty of dentistry in Benghazi. The questionnaire included: Frequency of tooth brushing, type of tooth brush, if they were using any other hygienic tools such as interdental brush and or mouth wash, number of visits to periodontist per year. Statistical analysis was performed using IBM. SPSS V.22. The frequency and crosstab analysis by Chi square test.

Results: Most of the patients were brushing 3 times per-day (49%) followed by twice per-day (27%), while the least was once per-day (5.9%). 41.2% of patients were using inter dental brush, while 58.8% were not. Regarding using mouth wash 49% of patients used it while 51% were not used it. Visits to periodontal specialists found only in 23.4% of patients.

Conclusion: Most the patients were about oral hygiene measures. However further clinical research should be done to support this findings

Keywords: Orthodontics; Oral Hygiene; Fixed Appliance; Oral Hygienic Tools

Introduction

Oral hygiene professionals are constantly faced with patients under orthodontic treatment [1] as fixed appliances cause plaque accumulation around bands and brackets [2]. During last years the patients' aesthetic demands are deeply rising, thus increasing the requests for invisible lingual orthodontic therapy [3]. Dental hygienists therefore are and will be more and more involved in oral health maintenance of patients with these aesthetic appliances. Oral hygiene protocols for patients during orthodontic treatment include both verbal education and professional treatments with rotating brushes and ultrasonic scalers [4-6].

Optimal oral hygiene requires thorough and clear professional instructions, adequate tools, and patient motivation, which is an essential factor to obtain compliance [7,8]. A systematic review of randomized controlled trials conducted by Gao and colleagues [9] showed varied success in using motivational approaches, which are potentially more useful to achieve behavioral changes than conventional health education, focusing on disseminating information and giving normative advice. Studies in medicine and dentistry have asserted that active reminders induce positive behavioral change and disease prevention.

Citation: Iman Abdelgader, et al. "An Audit of Oral Hygiene Maintenance among Orthodontic Patients in Benghazi". *EC Dental Science* 17.3 (2018): 107-110.

Aim of the Study

Aim of this study was to evaluate the oral hygiene maintains of orthodontic patient and if they were following to instructions of their orthodontist to avoid the adverse effect of orthodontic treatment.

Material and Method

This was a questionnaire design study were an Arabic written questionnaire was prepared by a specialist in orthodontics (first Author). A questioner was distributed to a total number of 50 (8 males and 42 Females) orthodontic patients, 18 were from private orthodontic clinic of Benghazi dental center and other 32 from orthodontic department in faculty of dentistry in Benghazi. The questionnaire included: Frequency of tooth brushing, type of tooth brush, if they were using any other hygienic tools such as interdental brush and or mouth wash, number of visits to periodontist per year. Statistical analysis was performed using IBM.SPSS V.22. The frequency and cross-tab analysis by Chi square test.

Result

Visits to periodontal specialists found only in 23.4% of patients (Figure 1). Most of the patients were brushing 3 times per-day (49%) followed by twice per-day (27%) (Figure 2), while the least was once per-day (5.9%). Difficulty in brushing was recorded in 35% of the cases (Figure 3). 41.2% of patients were using inter dental brush, while 58.8% were not. Regarding using mouth wash 49% of patients used it while 51% were not used it.

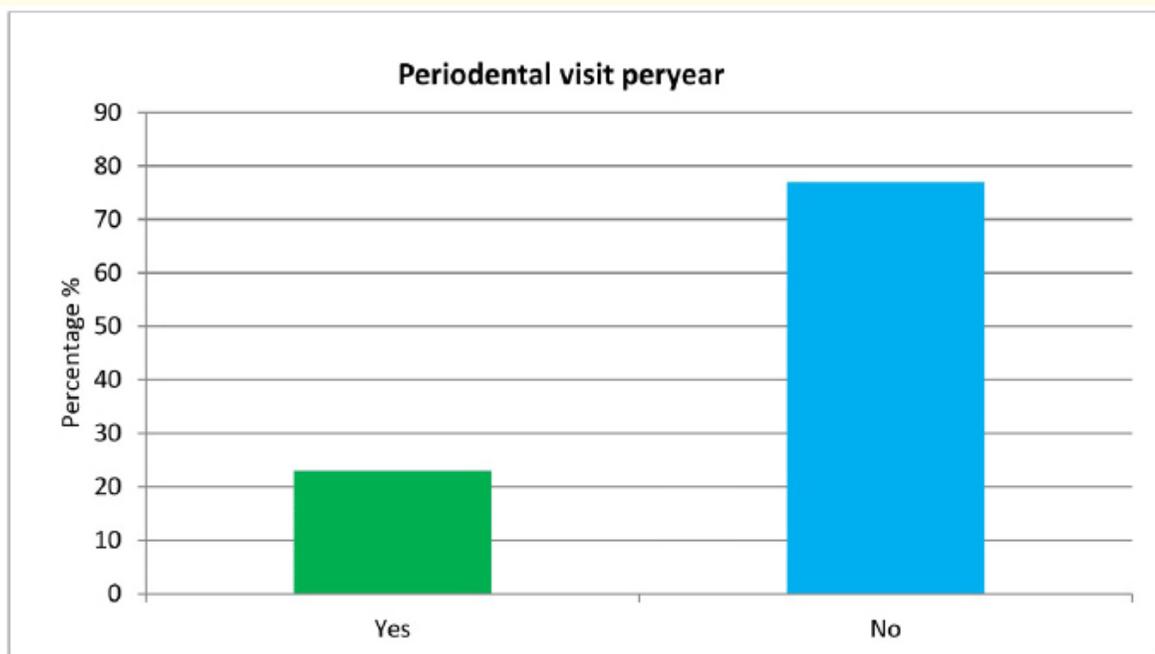


Figure 1: Number of visit to periodontist per year.

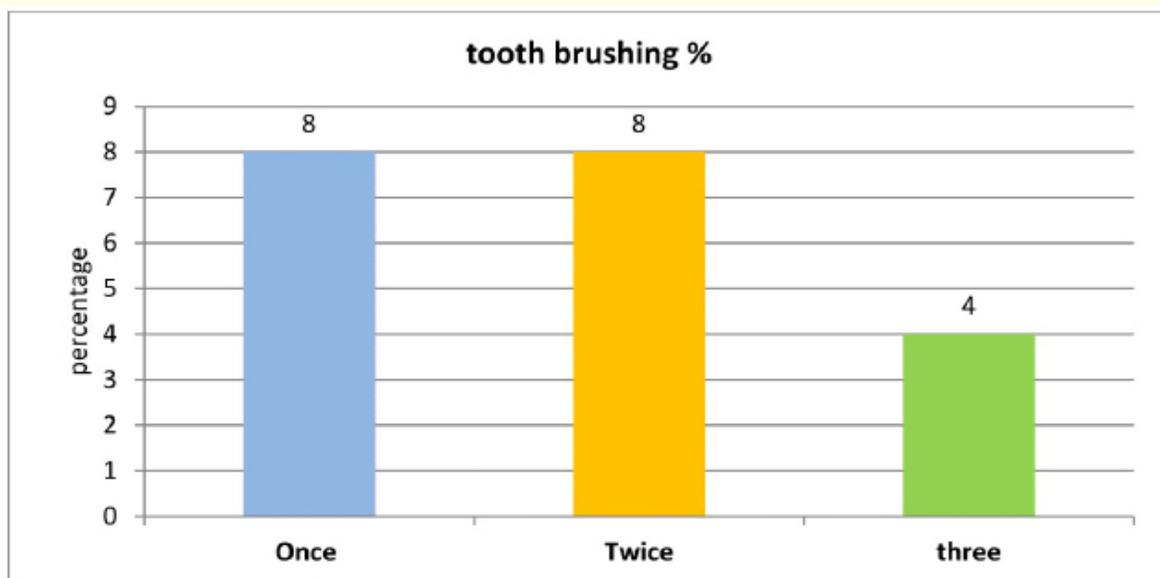


Figure 2: Frequency of tooth brushing.

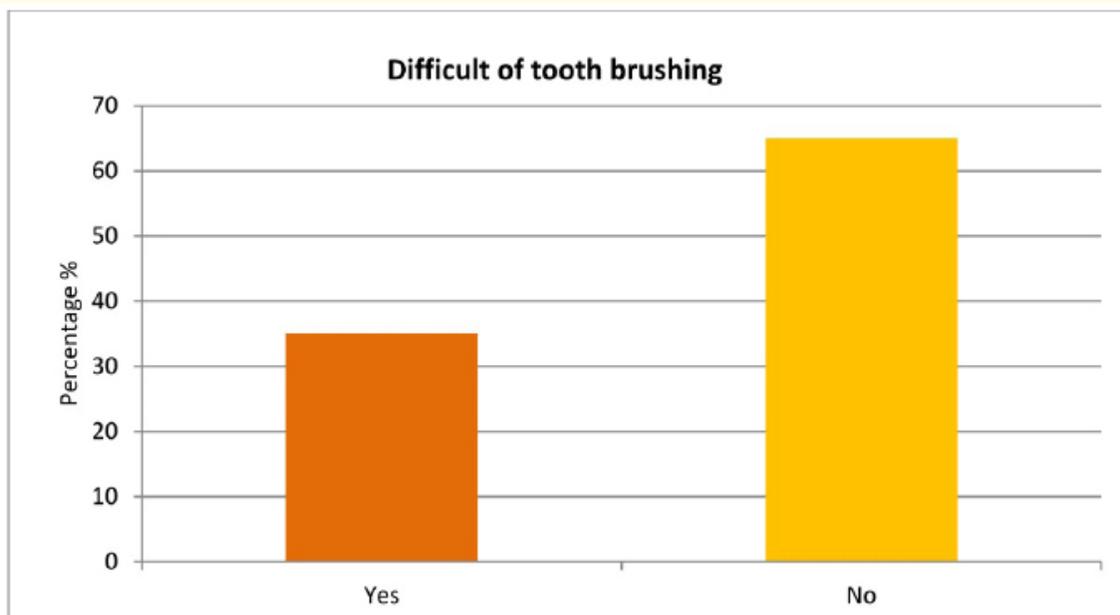


Figure 3: Difficulty in brushing.

Discussion and Conclusion

Maintaining optimal oral health during orthodontic treatment is now recognized as an important factor in the immediate and long-term health of teeth. Orthodontic patients are at a higher risk during treatment especially with fixed appliance because of poor oral health due to difficulty in brushing and food accumulation. Dental hygienists therefore are and will be more and more involved in oral health maintenance of patients with these appliances. Oral hygiene instructions for patients during orthodontic treatment include both verbal education and professional treatments with rotating brushes and ultrasonic scalers is recommended.

From this study it was found that the Orthodontic patients included in this study are aware about the oral hygiene methods and following the instructions of their doctors. However more further research is recommended to support this study.

Conflict of Interest

I declare that I do not have any financial interest and there is no conflict of interest exists.

Bibliography

1. Hua F, *et al.* "Oral hygiene care for critically ill patients to prevent ventilator-associated pneumonia". *The Cochrane Database of Systematic Reviews* 10 (2016): CD008367.
2. Shaw WC., *et al.* "The influence of dentofacial appearance on the social attractiveness of young adults". *American Journal of Orthodontics* 87.1 (1985): 21-26.
3. Zhang M., *et al.* "Orthodontic treatment need and oral health related quality among children". *Community Dental Health* 26.1 (2009): 58-61.
4. Hassan AH and Amin Hel S. "Association of orthodontic treatment needs and oral health-related quality of life in young adults". *American Journal of Orthodontics and Dentofacial Orthopedics* 137.1 (2010): 42-47.
5. Fjeldsoe BS., *et al.* "Behavior change interventions delivered by mobile telephone short-message service". *American Journal of Preventive Medicine* 36.2 (2009): 165-173.
6. Almog DM., *et al.* "The reduction of broken appointment rates through an automated appointment confirmation system". *Journal of Dental Education* 67.9 (2003): 1016-1022.
7. Claydon N. "Current concepts in toothbrushing and interdental cleaning". *Periodontology 2000* 48.1 (2008): 10-22.
8. Al-Anezi SA and Harradine NW. "Quantifying plaque during orthodontic treatment: a systematic review". *Angle Orthodontist* 82.4 (2011): 748-753.
9. Gao X., *et al.* "Motivational interviewing in improving oral health: a systematic review of randomized controlled trials". *Journal of Periodontology* 85.3 (2014): 426-437.

Volume 17 Issue 3 March 2018

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