

Awareness of Fake Braces Usage Among Y- Generations

Rohaya Megat Abdul Wahab^{1*}, Siti Khadijah Hasan¹, Nor Ermamarsila Mohd Yamin¹,
Zurairah Ibrahim²

1. Unit of Orthodontics, Centre for Family Oral Health, Faculty of Dentistry, Universiti Kebangsaan Malaysia, Malaysia.

2. Department of Orthodontics, Faculty of Dentistry, Universiti Sains Islam Malaysia, Malaysia.

Abstract

A study to investigate the level of fake braces awareness among Y-generations involving 170 students age between 19-25 years old from a government University. A questionnaire was created and validated prior assessment on the students' knowledge on dental health treatment, orthodontic treatment and fake braces.

The respondents were females (88%) and 12% were males in the Universiti Kebangsaan Malaysia. Most of the respondents (99%) concerned about their dental health and knew all dental treatments. Only 71% seek treatment when they have dental problems, 95% of the respondents knew fixed braces treatment but 48% thought the treatment should be provided by an orthodontist. Sixty-one percent of the respondents knew the fake braces from the internet (66%), reading (29%) or while visiting dental clinics (3%).

Most of the respondents taught fake braces were cheaper and advanced in style. Only 35% of the respondents aware about the dangerous side effect of fake braces. The students have awareness on dental health and dental treatments provided in Malaysia, but minority are aware of the side effects of wearing fake braces.

Clinical article (J Int Dent Med Res 2019; 12(2): 663-666)

Keywords: Braces, Awareness, Dentistry, Youth.

Received date: 16 June 2018

Accept date: 12 August 2018

Introduction

Orthodontic is a branch of dentistry that concerned with facial growth, development of the dentition and occlusion, diagnosis, interception, and treatment of occlusal anomalies. Malocclusion not only affects such functions as mastication, speech and esthetics but also has psychosocial consequences because of the unacceptable dental esthetics.¹ Furthermore, the orthodontic problems may lead to other dental health problems such as caries and traumatized tooth.² The orthodontic treatment being carried out based on several principles such as to improve dentofacial appearance, to correct occlusal relationship and to eliminate malocclusion that could damage long term health of the teeth and periodontium. The demand for

orthodontic treatment is increasing in trend as the population are more concern about dental health and aesthetics. Dental appearance is an important feature in determining the attractiveness of oneself and plays a key role in human social interactions.

The increasing concern of general arrangement of teeth has resulted in most of teenagers in Asian to take the simplest way to use the fake braces rather than seeking for orthodontic treatment provided by the professionals. To date, there are only about 200 registered orthodontists practicing in Malaysia, thus this shortage of orthodontists rarely meets the thousands of orthodontic demands of Malaysian.³ Therefore, the trend of using fake braces that was first reported in Thailand had begun to spread to other Asian countries such as Indonesia, China and Malaysia. There is an increasing demand in the fake braces' usage among the Y- generations because of the cheaper prices and easily to be purchased using internet or even in the kiosks at shopping malls. Y- generation refers to the specific generation born between the 1980's to the early 1990's. This generation is technologically-savvy as they grew

*Corresponding author:

Rohaya Megat Abdul Wahab

Unit of Orthodontics, Centre of Family Dental Health,
Faculty of Dentistry, Universiti Kebangsaan Malaysia,
Kuala Lumpur, Malaysia.

E-mail: rohaya_megat@ukm.edu.my

up in the information age and prone to use the social media on daily basis that more inclined to use sources from internet because the information is easily retrieved and more effective compared to printed sources such as books, magazine, or lent materials from library.^{4,5} Wearing braces as sign of wealth and prestige has become a popular trend among the teenagers. Hence, some of them tend to seek fake braces which is way cheaper compared to orthodontic treatment provided by the specialist. The demand for fake braces keeps increasing in numbers even though there were already two cases of death reported in Thailand due to heart failure caused by thyroid infection. This happens because the Y-generations were not aware about dangerous side effects of the fake braces to their dental health. The fake braces have also been associated with many problems such as gum problems, mouth ulcers, infections, irregularly structured teeth and tooth decay and has been deemed unsafe based on health reports as the use of instrument that is not sterile can cause infections and allergies.

There are multi-factorial factors for seeking orthodontic treatment such as social class, economic considerations, individual perceptions of psychosocial benefits and attitudes towards appliances.^{6,7} Lew⁸ found that 80% of respondents stated that orthodontic treatments helped in boosting their self-confidence and self-esteem. Nowadays, the demand for orthodontic treatment is also rising due to an improved awareness in health and expectations in populations due to the increased in dentist to population ratio.⁹ Mostly the orthodontic treatment is carried out because of aesthetics.¹⁰ Even though most of the populations are concerned about their dental appearance but not all people are suitable to undergo orthodontic treatment. In order to assess the need of orthodontic treatment, Index of Orthodontic Treatment Need (IOTN) was developed that consisted of 2 parts; Dental Health Component (DHC) and Aesthetic Component (AC) to rank malocclusion from the worst to the best. The worst feature of the presenting malocclusion is matched to the list and given the appropriate score.¹¹ Many hospital orthodontic services will not accept patients in categories 1–3 of the dental health component or grade 6 or less of the aesthetic component of the IOTN unless they are suitable for undergraduate

teaching purposes similar to orthodontic services in UKM.

Kerosuo et al.¹² reported that orthodontic treatment has a positive effect on young adults self-perceived dental treatment needs. Orthodontic treatment can bring many psychosocial benefits including an improvement in esthetics perception and reduction of social anxiety.¹³ Currently, there are no data about awareness and usage of the fake braces among Y-generations in Malaysia. Therefore, this study aims to assess the level of knowledge and awareness of students in UKMKL about importance of dental health, reasons on why the fake braces becoming a trend nowadays among Y- generations and the side effects of wearing the fake braces.

Materials and methods

This was a cross-sectional study involving 170 students under the age of 30 years old studying in the UKMKL from the Faculty of Pharmacy and the Faculty of Health Science. The ethical approval was obtained from the Research Ethics Committee, Universiti Kebangsaan Malaysia. The questionnaires had been created and validated prior to the data collection. The questionnaires comprised of four different parts which were part 1: demographic data, part 2: knowledge about dental treatment, part 3: knowledge about orthodontic treatment and part 4: knowledge about fake braces and its side effects.

Results

A total of 170 respondents comprised of 150 females (88%) and 20 males (12%) students within the age between 19-25 years old (94%) answered the questionnaire in the study. The level of education for all subjects are in their first-degree level of study and majority of their family income were in the range of more than RM6000 (15%), RM1000-3000 (45%), RM3000-6000 (25%) and less than RM1000 (15%). Majority of the respondents support their study by scholarship (64%), followed by loans (24%) and self-sponsored (12%). Regarding the uses of expenses, most of the respondents spent their money on foods and drinks (20%), followed by study fees (20%), stationeries (18%), clothes (14%), house rent (9%), entertainment (8%),

medical check-up (5%), gadget (5%) and the least expenses was for dental check-up (2%)

Majority of the respondents were concerned about their dental health (99%) where 90% of respondents had experienced of attending on dental check-up. Even though the percentage of respondents on attending dental check-up was high, most of them only seek for dental procedures when they had toothache (71%), followed by dental appointment (24%) and only small percentage of respondents seek dentist regularly every 6 months (5%). Majority of the respondents knew the dental treatments provided in UKMKL such as tooth extraction (25%) and filling (25%), denture construction (22%), root canal treatment (15%) and gum treatment (13%).

Ninety-five percent of the respondents heard about the fake braces and most of them knew about fake braces from the social media (37%), followed by reading (31%), from dental clinic (18%) and lastly by dentist (14%). In addition, most of the respondents gave their opinions regarding the conditions of teeth that required fake braces were especially because of crooked teeth (38%), followed by spacing (34%) and crowding (28%). Most of respondents knew the correct people that can provide the treatment for fixed orthodontic appliances which were the orthodontic specialist (48%) but some respondent thought fixed braces can also be provided by the general dental practitioner, dental surgery assistant and event can be done as Do-It-Yourself. Furthermore, majority of the respondents are lack of knowledge about the treatment fees for orthodontic treatment and duration taken for the orthodontic treatment. Thus, this maybe one of the reasons why the Y-generations used the fake braces because they thought that it can provide a faster treatment and cheaper compare to the fixed orthodontic appliances.

Discussion

The 170 respondents participated in this study represent the students in UKMKL where majority of students were female. More than half of the respondents came from a low-income family that can be reflected by the number of scholarship holder for financial support of students' education in the university. They used the secured scholarship to support study fees,

food and drinks, stationeries, clothes, house rental, entertainment and gadgets. Only a small portion of the scholarship were used for medical and dental check-up. Students of UKMKL are very fortunate because there is available dental clinic in the university which they can receive dental treatment for free if it is treated by undergraduate dental students during undergraduate dental clinics as part of their training purposes. With this privilege, students do not need to spend much of their money on dental treatment. The majority of respondents only seek dentist when having tooth ache although they knew the importance of dental health with only minority group of respondents do regular check-up to dentist twice a year. This finding was similar to Fawzan¹⁴ that reported most of the patients visit dentist when they are having dental related problems. The reason this is happened because of the behavior and attitude of students towards dental care were low and also can be related to their busy schedule as a university student. This problem of failing to see dentist regularly not only happen among students in UKMKL but also involved other community and it is found that the irregular routine dental attendance pattern was associated with more dissatisfaction with dental appearance.¹⁵ The knowledge regarding dental treatment available such as extraction, filling, denture construction, gum treatment and root canal treatment among respondents were good as the information were easy to be accessed nowadays especially by social media.

Abdullah⁶ mentioned most people who seek orthodontic treatment because they were concern with their appearance. The term "braces" is well known among public because of the worldwide information about braces in social media. Overall, the respondents knew the reasons for wearing braces such as crooked teeth, spacing teeth and crowding teeth. The reasons that listed by the respondents were related to the appearance rather than function of teeth where the main reason adult individuals seek for orthodontic treatment because of dissatisfaction with their dental and facial appearance.¹⁶ Besides that, most of respondents had chosen the best provider for orthodontic treatment is the orthodontist, which means that the respondents have general knowledge and awareness about dental treatment provider.

The level of awareness among students

about fake braces and its side effects revealed that social media played an important source of information compared to reading materials like books and leaflets as it is easily access anything from the social media at anytime and anywhere. In the recent years, social media had become ubiquitous and important for social networking and content sharing. Social media content can be used to predict real-world outcomes. The uses of internet (Instagram, Facebook) favours such as online sales⁵ of these fake braces as they use eye-catching attractive designs in their open website especially to the teenagers. The result of this survey showed highest percentage of respondent have access to the fake braces in the internet followed by kiosk and shopping malls. The attraction of fake braces has become a trend among youngsters because of the low and affordable price, easy accessibility for youngsters to pay by their own money and to look stylish wearing colorful beautiful design of the fake braces while the real braces were reported to be way too expensive.¹⁷ The community must be made aware of the side effects of wearing fake braces as the current study found that respondents are not aware the dangerous effect of fake braces to the oral health and not concern about the death case because of fake braces.

Conclusions

Generally, most of respondents were concerned about their dental health but unfortunately only minority seek dentist regularly every 6 months and mostly comes for dental check-up only when having dental problems. The level of awareness regarding fake braces among Y- generation was low where only minority of respondents know about the dangerous effect of fake braces. The fake braces became a trend because of they are cheaper, stylish, as a fashion trend, easily available and do not need follow up treatment as compared to orthodontic treatment by the orthodontic specialists.

Declaration of Interest

The authors report no conflict of interest.

References

1. Abdul Rahim FS, Mohamed AM, Nor MM, Saub R. Malocclusion and orthodontic treatment need evaluated among subjects with Down syndrome using the Dental Aesthetic Index (DAI). *Angle Orthodontist* 2014;84(4):600-06.
2. Sharihan K AAA, Rohaya MAW. A Modified Aesthetic Component of IOTN among Malaysian Population. *The International Journal of Oral Health* 2011;7:7-11.
3. Abdullah AAA, Ruslan R, Yashin SHM. An Audit Of The Caseload And Waiting Time For Orthodontic Treatment In A University Setting. *Malaysian Dental Journal* 2011;32(1).
4. Manaf SZA, Din R, Hamdan A, et al. The Usage of Computers and Internet Web 2.0 in Generation Y among University Students. *Journal of Advanced Research Design* 2015;7(1):10-18.
5. Muda M, Mohd R, Hassan S. Online purchase behavior of Generation Y in Malaysia. *Procedia Economics and Finance* 2016;37:292-98.
6. Abdullah A, Yassin Z, Zamzam N. Reasons For Seeking Orthodontic Treatment A Pilot Study. *Annals of Dentistry (ADUM)* 2001;8(1):13-19.
7. Hamdan AM. The relationship between patient, parent and clinician perceived need and normative orthodontic treatment need. *The European Journal of Orthodontics* 2004;26(3):265-71.
8. Lew KK. Attitudes and perceptions of adults towards orthodontic treatment in an Asian community. *Community Dentistry and Oral Epidemiology* 1993;21(1):31-35.
9. Jawad Z, Bates C, Hodge T. Who needs orthodontic treatment? Who gets it? And who wants it? *British dental journal* 2015;218(3):99.
10. Roberts-Harry D, Sandy J. Orthodontics. Part 1: who needs orthodontics? *British Dental Journal* 2003;195(8):433.
11. Sharihan K, Asma Alhusna AA, Rohaya MAW (2011). A Modified Aesthetic Component of IOTN among Malaysian Population. *The International Journal of Oral Health*, 7:7-11.
12. Kerosuo H, Kerosuo E, Niemi M, Simola H. The need for treatment and satisfaction with dental appearance among young Finnish adults with and without a history of orthodontic treatment. *Journal of Orofacial Orthopedics/Fortschritte der Kieferorthopädie* 2000;61(5):330-40.
13. Birkeland K, Bøe OE, Wisth PJ. Orthodontic concern among 11-year-old children and their parents compared with orthodontic treatment need assessed by index of orthodontic treatment need. *American Journal of Orthodontics and Dentofacial Orthopedics* 1996;110(2):197-205.
14. Al Fawzan A, Al Fawzan A. Reasons for seeking orthodontic treatment in Qassim region: a Pilot Study. *Int Dent J Stud Res* 2013;1:58-62.
15. Shaw W. Factors influencing the desire for orthodontic treatment. *The European Journal of Orthodontics* 1981;3(3):151-62.
16. Oliveira PGdSA, Tavares RR, Freitas JcD. Assessment of motivation, expectations and satisfaction of adult patients submitted to orthodontic treatment. *journal of orthodontics*. 2013;18(2):81-87.
17. Hansen L. Fake Braces: Asia's curious teenage fashion trend. *The Associated Press: New York Daily News*; 2013.