

The oral and dental health status among people in Sharkhan village

Mu'taz Gh ALI*
Talal H AL-SALMAN**
Nawfal A ZAKARIA***

ABSTRACT

A survey of (213) subjects from Sharkhan village near Mosul city was involved by questioner to evaluate the methods used to maintain the oral and dental health and involved also a clinical examination for the sample to evaluate the incidence of dental carries according to G.V Black classification. The study showed that only (1.66%) of sample were visit the dentist regularly, (53.33%) were visit the dentist on need only and (45.01%) never visit the dentist. About the methods used to maintain the oral hygiene, the questioner showed that (61.92%) of sample never used tooth brush, (15%) used the brush regularly, while (23.08%) brushing there teeth intermittently. The questionnaire explained that (28.43%) using mouth wash, (4.68%) using dental floss, (10%) using picks and only (3.84%) using wood stick (Miswak). The examination showed that tooth (23.27%) of sample having (1-3) carious teeth, (34.06%) having (4-6) carious teeth and this mean that (3.16%) of sample were caries free. The pits and fissures caries was the type of highest percentage (67.06%) followed by proximal caries (22.8%) and other types of classification were less.

Key words: oral health, dental status, caries incidence.

الخلاصة :

شملت هذه الدراسة (213) شخص من عينة عشوائية لدراسة ميدانية لقرية الشريخان قرب مدينة الموصل عن طريق استبيان لتقييم الطرق المختلفة للمحافظة على صحة الفم والأسنان كما شملت على فحص سريري للعينة لتقييم نسبة نخر الاسنان لديهم وتصنيفه حسب تصنيف بلاك . أظهرت الدراسة أن نسبة المرضى الذين يراجعون طبيب الاسنان بانتظام كانت (66, 1%) وان (33, 3%, 53%) يراجعون طبيب الاسنان عند الحاجة فقط بينما كان هناك نسبة (45, 01%) لم يراجعوا طبيب الاسنان نهائياً . أما بالنسبة لطرق العناية بالأسنان فان نتائج الاستبيان أظهرت أن (92, 61%) من العينة لا يستعملون الفرشاة والمعجون بينما هناك (15%) يستعملون الفرشاة بانتظام وان (23, 08%) ينظفون أسنانهم بالفرشاة والمعجون بشكل متقطع. هناك طرق أخرى للعناية بالأسنان تم الاستفسار عنها عن طريق الاستبيان وظهر أن (43, 28%) يستعملون المضمضة وان (68, 4%) يستعملون الخيوط لتنظيف الاسنان وان (10%) يستعملون العيدان بينما كانت نسبة الذين يستعملون السواك (3, 84%). اظهر الفحص السريري أن (27, 23%) من العينة لديهم (1-3) أسنان منخورة وان (6, 34%) لديهم (4-6) أسنان منخورة وان (51, 39%) لديهم اكثر من (6) أسنان منخورة وهذا يعني أن (3, 16%) فقط من العينة ليس لديهم أي تسوس في أسنانهم . وكانت نسبة تسوس الاسنان في الأسطح الاطباقية هي الأعلى بين جميع أنواع التسوس حسب تصنيف بلاك (67, 06%) ويليه نخر الاسنان من الأسطح الانسيه والوحشيه (22, 8%). أما بقية التصنيفات فينسب اقل .

*Mu'taz Ghazi ALI; BDS, MSc: Lecturer

** Talal Hameed AL-SALMAN; BDS, MSc: Lecturer

*** Nawfal Abdul-Malik ZAKARIA; BDS, MSc: Lecturer.

Department of Conservative Dentistry, College of Dentistry, University of Mosul, Mosul, IRAQ.

INTRODUCTION

Dental caries and periodontal disease are probably the most common chronic diseases in the world ⁽¹⁾. Hundreds of researches in the oral dental fields are concerning with the etiology, management and methods of prevention of these two types of diseases.

Mechanical and chemical methods are used for control of periodontal health like teeth brushing with tooth paste, using of tooth picks, wood sticks, mouth washes & dental flossing.

Dental caries has affected humans since prehistorically times, It is known as multifactorial disease and predisposing factors such as socioeconomic status and sex may influence its occurrence ⁽²⁾.

The aim of this study is to evaluate the incidence and prevalence of dental caries and methods used for maintenance of oral health among people in Sharkhan village.

MATERIALS AND METHODS

This study was performed through a wide epidemiological survey by the University of Mosul for Sharkhan village.

The study was performed through questionnaire distributed to (213) randomly selected subjects (from 18 - 60 years old).

The questionnaire (Appendix) was filled by three authors.

Each member in the sample was examined clinically by using dental mirror & probe exploration and examination of dental caries. The lesions were classified according to G.V. Black classification ⁽¹⁾.

The examination was also include an evaluation of the number of missing teeth & their replacement.

The questionnaire was involved informations about the sex, age, & number of visits to the dentist.

Information about the methods used for maintenance of oral hygiene like teeth brushing, using of mouthwashes, tooth picks, dental floss & wood stick (Miswak) was also evaluated.

RESULTS AND DISCUSSION

The data was collected & the percentage of each variable was calculated. The total number of the sample was (213) person (57% male & 43% female), the age range was (18-60 years old).

The results of questionnaire revealed that (45.01%) of the sample having no history of any dental treatment, where as (53.33%) visit the dentist on need only and just (1.66%) having regular visits to dental clinics (table 1 and figure 1).

Table (1): The percentage of people regarding their visit to dental clinic

Visits to dental clinic	Percentage
Regular visit	1.66
Visit on need only	53.33
Never visit the dentist	45.01

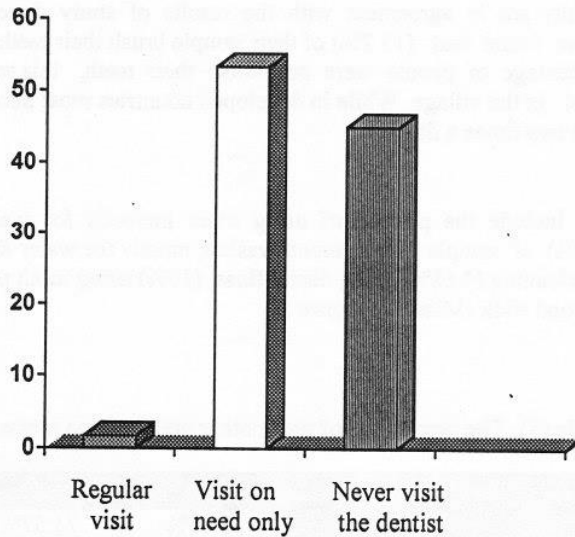


Figure (1): The percentage of people regarding their visit to dental clinic

This result is not agree with results of other studies done by Khamrco & Makani⁽³⁾ and Khamrco *et al*⁽⁴⁾. In these two studies, the highest percentage of people never visit the dentist, while in this study, the highest percentage was visit the dentist on need only, this may because this study was performed in a village near the city center & the people can visit dental clinics on need easily.

The data collected a bout teeth brushing explained that only (15%) of subjects using tooth brush regularly and (23.08%) using brush intermittently, this mean that (61.92%) of the sample never brush their teeth (table 2 and figure 2)

Table (2): The percentage of use of tooth brush

Use of tooth brush	Percentage
Regular	15
Intermittent	23.08
Never use the brush	61.92

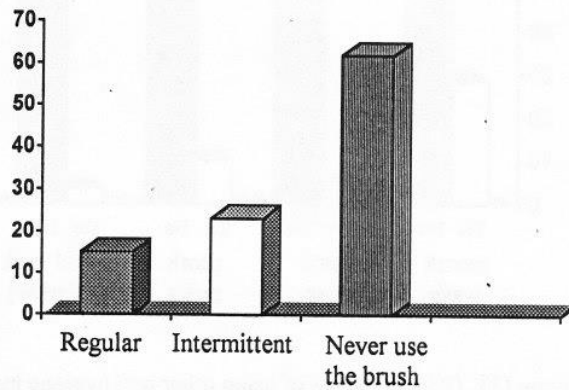


Figure (2): The percentage of use of tooth brush

These results are in agreement with the results of study done by Abdal & Khamro⁽⁵⁾ whose found that (15.2%) of their sample brush their teeth regularly and the highest percentage of people were not brush their teeth, this may due to low educational level in the village. While in developed countries most people now clean their teeth one to two times a day^(6,7).

Table (3) include the percent of using other methods for maintaining oral hygiene, (28.43%) of sample using mouthwashes, mostly the water & salt solution. For interdental cleaning (4.68%) using dental floss, (10%) using tooth picks, and only (3.84%) using wood stick (Miswak) (figure 3).

Table (3): The percentage of using other oral hygiene measures

Oral hygiene measure	Yes	No
Mouth wash	28.43%	71.57%
Dental floss	4.68%	95.32%
Tooth picks	10%	90%
Wood stick (Miswak)	3.84%	96.16%

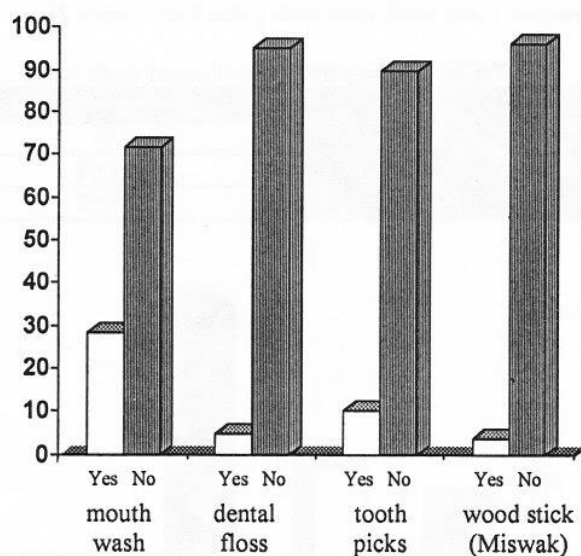


Figure (3): The percentage of using other oral hygiene measures

These results are approximately similar to results obtained by Abdulla *et al*⁽⁸⁾ whose performed their study in the same village, they found that (21.9%) of their sample using mouth wash, (4.8%) flossing their teeth, (10.5%) using tooth picks and (8.7%) using Miswak .

The examination of the subjects showed that (60.4%) of the total sample having missing teeth, (44.3%) of them having (1-3) missing teeth, (9.4%) having (4-6) missing teeth where as (6.7%) having more than six teeth missing. (table 4 and figure 4).

Table (4): The percentage of missing teeth among people of Sharkhan

Missing teeth	Percentage
(1-3) missing teeth	44.3
(4-6) missing teeth	9.4
More than 6 missing teeth	6.7
No missing teeth	39.6

Only (6.6%) replacing their missing teeth with dental prosthesis. Abdal & Khamrco⁽⁵⁾ found that the percentage of missing teeth was (59.7%) and the percentage of replacement with prosthesis was (8.4%) this study was performed in the same village in 1988 and it's results in this coincides with the results of the present study. The high rate of missing teeth corresponding to the low rate of their replacement may due to low income level of the people and poor knowledge about the advantage of missing teeth replacement.

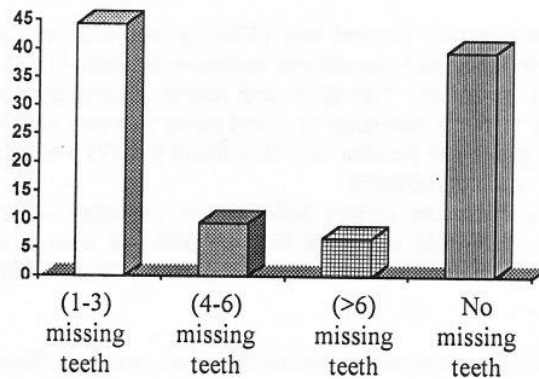


Figure (4): The percentage of missing teeth among people of Sharkhan

The exploration of dental caries assured that only (3.1%) of subjects are caries free, whereas (96.84%) having dental caries distribution as (23.27%) having (1-3) carious teeth, (34.06%) having (4-6) carious teeth and (39.51%) of them having more than six carious teeth (table 5 and figure 5).

Table (5): The percentage of dental caries among people of Sharkhan

Dental caries	Percentage
(1-3) caries teeth	23.27
(4-6) caries teeth	34.06
more than 6 caries teeth	39.51
No caries teeth	3.16

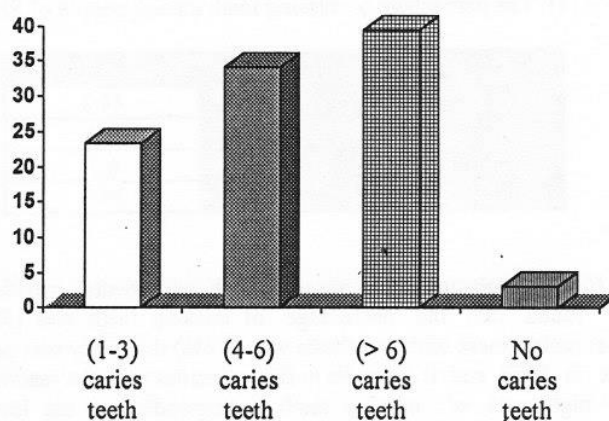


Figure (5): The percentage of dental caries among people of Sharkhan

The examination showed that (27%) of subjects who having dental caries, restoring their teeth with permanent restorations while (73%) of them leaving their teeth without treatment. This agree with results obtained by Khamrco & Makani ⁽³⁾, whose found that the incidence of dental caries was very high when comparing with incidence of caries free persons, also they found that (73.5%) of subjects leaving their carious teeth with out treatment.

In this study, the carious lesions were classified according to G.V. Black classification. Table (6) explained that (67.06%) of lesions were class I, Class II caries (22.8%), Class III (5.1%), Class IV (2.0%), Class V (2.97%) and finally class VI (0.07%).

Table (6): The percentage of dental caries according to Black's classification.

Dental caries	Percentage
Class I	67.06
Class II	22.8
Class III	5.1
Class IV	2.0
Class V	2.97
Class VI	0.07

These results are agree with Khamrco *et al*⁽⁹⁾ whose performed a study in Hamam Aleel village and found that the highest percentage of dental caries was CI I caries, then CI II caries and the least percentage were CI III and CI IV caries extension. These differences in caries susceptibility may be related to difference in the morphology of the teeth (sticky fissures and pits) therefore the use of pits and fissures sealant is the most effective caries preventive method^(10,11).

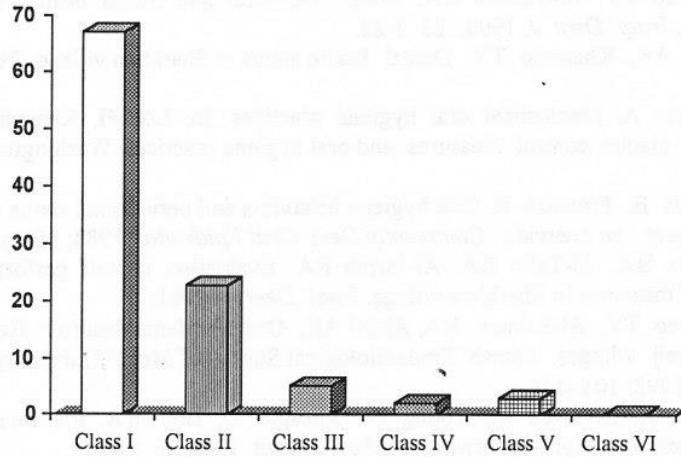


Figure (6): The percentage of dental caries according to Black's classification

APPENDIX

The formula of questionnaire used in the study

- Age Sex.....
- *Visits to the dental clinic :
 - Regularintermittent Visit on need only
 - Never visit the dentist
 - Using of toothbrush and paste :-
 - Regularintermittentoccasionally
 - Never use the brush
 - Using of mouth wash ? yesNo type.....
 - Using of dental floss ? yesNo
 - Using of tooth picks ? yesNo
 - Using of the wood stick (Miswak) ? yesNo
 - Others : please write
- *Missing teeth
- *Crown & bridges

8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8

REFERENCES

1. Sturdevant CM. The Art and Science of Operative Dentistry. 2nd Edn. CV Mosby Co. 1985.
2. Wedad HS. Oral health status among 8th grade Baghdadian teenagers. *Iraqi Dent J.* 1987; 13: 170-176.
3. Khamrco TY, Makani LA. Dental and oral health status in Sada and Baweza village. *Iraqi Dent J.* 1997; 20: 3-23.
4. Khamrco TY, Al-Salman KA, Abdal AK. Oral and dental health in Humaidat village. *Iraqi Dent J.* 1998; 23: 3-22.
5. Abdal AK, Khamrco TY: Dental health status in Sharkhan village. *Iraqi Dent J.* 2000;
6. Frendsen A. Mechanical oral hygiene practices. In: Løe H, Klenman D (Eds). Dental plaque control measures and oral hygiene practices. Washington, DC, IRL Press.
7. Honkala E, Freeman R. Oral hygiene behaviors and periodontal status in European adolescent : an overview. *Community Dent Oral Epidemiol.* 1988; 16(4): 194-198.
8. Abdulla BA, Al-Talib RA, Al-Jarrah RA. Evaluation of self performed plaque control measures in Sharkhan village. *Iraqi Dent J.* 2001;
9. Khamrco TY, Al-Salman KA, Abdal AK. Oral and dental health in Bene Hamdan and Uraij villages. Fourth Epidemiological Survey of Mosul University in Hamam Aleel. 1992: 101 -114.
10. Stephen K, Kirkwod M, Young D, Gillespie D, Boylep R. Fissure sealing with Nova-seal and Alpha-seal two years data. *J Dent.* 1981; .9: 53-59.
11. Khamrco TY. Sealant retention and effects on occlusal caries : Finding after two years in Ninevah, Iraq. *Iraqi Dent J.* 1999; 24: 119-129.