Caries risk assessment of a sample of children attending preventive specialized dental center in Al Resafa, Baghdad

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ABSTRACT

Background: Young children's oral health maintenance and outcomes are influenced by their parent's knowledge and beliefs, which affect oral hygiene and healthy eating habits. This study aims at assessing caries risk in children aged 6 months to 6 years attending the Specialized Center of Preventive and Pediatric Dentistry Center at Al-Resafa sector in Baghdad.

Materials and Methods: A cross-sectional study was conducted from 15 May – 15 June 2018, all children attended the center (80 children) were assessed by using the standard caries risk assessment tool of the American Academy of Pediatric Dentistry (AAPD).

Results: The highest percentage of children was as follows: no fluoride exposure 44(55%), did not brush 46(57.5%), had no special health care needs 77(96.25%), had no missed teeth due to caries 51(63.75%), had no-visible plaque 52(65%), frequent or prolonged between-meal exposure/day 55(68.75%), their mothers had carious lesions in last 7-23 months 34(42.5%); in visual caries: had carious lesions or restorations in last 24 months 67(83.75%), while the incipient carious lesions in last 24 months were 50(62.50%). Most of risk assessment score for the participants was moderate 57(71.3%), followed by low risk 16(20%), while the participants with high risk were 7(8.8%), with a statistically significant association between the risk assessment score and fluoride exposure (p=0.043), sugary foods or drinks(p=0.038), caries experience of the mothers (p=0.001), brushing (p=0.020) visual caries (p=0.000), incipient caries (p= 0.000), missing teeth due to caries (p= 0.001), but no statistical significance with special health care needs (p=0.533) and visible plaque (p=0.259).

Conclusion: Moderate-risk of developing dental caries was predominant among the participants, followed by low-risk and less high-risk categories.

Keywords: Caries risk assessment, pediatric caries, and oral health maintenance. (**Received: 24/09/2020; Accepted: 22/11/2020**).

INTRODUCTION

Globally, tooth decay is a significant public health issue and seems to be the most common non-communicable disease NCD.[1] Caries can result from three dynamically interrelated main factors: bacteria in the dental plaque, the host, and carbohydrates. [2] It is the chronic condition most prevalent amongst children and young adults, [3] and therefore the most frequently negatively affecting both oral and general health.[4,5] Although tooth decay is greatly preventable, it continues to be the main childhood chronic disease in children aged 6 to 11 years and adolescents aged 12 to 19 years. Among teenagers aged 14 to 17 years, dental caries is four times greater than asthma. [6]

Microbiological changes within the dental bio-film disrupt the remineralization /demineralization process of the tooth enamel; such equilibrium is also influenced by the flow and composition of saliva, fluoride exposure, refined sugar intake, and preventive habits (for example teeth brushing). [7]

The oral health care of young children, as well as the consequences, was affected by the knowledge and beliefs of their parents that affect healthy eating habits and oral hygiene.[8] Whether tooth decay progression is stopped, reversed, this depends on the balance involving protective and pathogenic factors.[9]

Caries risk assessment (CRA) is a key element of preventing dental caries and it should be viewed as a standard of care and used as part of the dental inspection. This is also important in decision-making so that the clinician be directed in the patient diagnosis, prognosis, and caries management guidance. [10]

It is common to assess the relative risk of developing caries in the patient. Risk assessment is necessary to avoid any disease and it directs practitioners to implement suitable preventive measures. There are different approaches for risk assessment of caries. CAT (Caries Risk Assessment Tool) was introduced by the American Academy of Pediatric Dentistry (AAPD).The assessment of the risk is based on the individual's clinical situation, environmental conditions, and overall health. On this basis, each child may be

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classified as having a low, moderate or high risk of developing caries.[11] The American Dental Association has developed a technique that identifies low, moderate or high risk for six months to six year old patients. [12]

The purpose of the caries risk assessment is to anticipate whether the disease is likely to develop in an as-yet-caries-free person or to assess the degree of progression of the disease in an individual who has some experience with caries already. Describing caries risk status to each patient is fundamental to treatment planning as it prompts the clinician to propose the most appropriate preventive strategy. The concept of risk assessment of caries for each child is to ensure that diagnostic tests selected, preventive and any restorative therapy are planned primarily for the needs of that particular individual.[13]

Objective:

To assess the caries risk of 6-months to 6-year-old children attended to the Specialized Center of Preventive and Pediatric dentistry in Al-Resafa-Baghdad/ Iraq. Moreover, to evaluate the association between the caries risk groups with different indicators.

MATERIALS AND METHODS

A cross-sectional study was conducted in Specialized Dental Center in Al-Resafa from 15 May – 15 June 2018, all children attended the center (80 children) were assessed by using the standard caries risk assessment tool of the American Academy of Pediatric Dentistry (AAPD), which assesses the risk based on the clinical condition of the individual, environmental factors, and general health. Children were examined for the followings: professional fluoride exposure and fluoridated dental brushing, presence of new incipient or cavitated caries, missing teeth due to caries or restoration in the last 24 months, presence of appliance in the mouth, and special healthcare need patients.

Standard caries risk assessment tool

It categorizes the children into 3 categories (low, moderate, and high) risk to develop caries in the future. The tool consists of one form questionnaire (figure 1) for the child (6months-6 years) answered by the parent interview and the child himself according to the tool (conducted by same author).

Questionnaire

It consists of contributed conditions (preventive and risk factors), general health conditions, and visualized clinical examination. The children were examined in dental clinics, the visual examination was performed in the dental chair using an operating light, a dental mirror, and teeth were dried with a triple syringe before the examination. The caries risk indicators are the variables that are thought to cause the disease directly (e.g., dental plaque) or have been shown useful in predicting it (e.g., frequent sugar consumption, primarily at mealtimes, frequently between-meals or by the bottle at bedtime). The presence of new incipient or cavitated caries, missing teeth due to caries, or restoration in the last 24 months may also give indications of caries risk activity. While the protective factors in caries risk include children receiving topical fluoride from a health professional, and having teeth brushed daily with fluoridated toothpaste. The visual clinical examination also included the caries experience of the mother, if there were any caries lesions in the last (6-24) months.

Included criteria:

The fluoride exposure depended in the study was the professional application only. The question about the regular brushing was added to the list, instead of the question: established record of patient receiving regular dental care in a dental clinic, due to the unavailability of established records. All children aged up to 6 years attended the Specialized Dental Center in Al-Resafa, and their parents accepted to get involved in the study during the data collection duration 15 May – 15 June 2018.

Excluded criteria:

The question: eligible for government programs was excluded due to the lack of government programs in Iraq at that time.

Statistical analyses:

Data entry and statistical analysis were conducted by using SPSS version 23. Frequencies and percentages, chi-square, and p-values were calculated and considered significant if less than 0.05.

Figure 1: Caries risk assessment form. Low Risk: only conditions in the "Low-Risk" column present; Moderate Risk: only conditions in "Low" and/or "Moderate Risk" columns present; High Risk: one or more conditions in the "High Risk" column.

RESULTS

Eighty children were enrolled in this study. From the history taking and by the clinical examination, the study revealed: no fluoride exposure 44(55%), did not brush 46(57.50%), had no special healthcare needs 77(96.25%), had no missed teeth due to caries 51(63.75%), had no visible plaque 52(65%), frequent or prolonged between-meal exposure/day 55(68.75%), their mothers had carious lesions in last 7-23 months 34(42.50%). In cases with visual caries: had carious lesions or restorations in last 24 months 67(83.75%), while the incipient carious lesions in last 24 months were 50(62.50%) this was done (Table 1).

Most of risk assessment score for the participants was moderate57(71.3%), followed by low risk 16(20%), while the participants with high risk were 7(8.8%), as shown in table (2) and figure (2). Table (3) shows the statistical significant associations between the risk assessment score and fluoride exposure (p=0.043), sugary foods or drinks (p=0.038), caries experience of mother (p=0.001), brushing (p=0.020), visual caries

(p=0.000), incipient caries (p=0.000), missing teeth due to caries (p=0.001), while non-significant relations with special health care needs (p=0.533) and visible plaque (p=0.259).

DISCUSSION

Caries risk assessment is known as a central element of caries prevention for children in clinical settings [14, 15]. Risk assessment includes identifying clinical and non-clinical indicators related to forthcoming caries development, within a broader caries management plan encircling individualized, prevention-focused, and minimally invasive care.[14]

The present study was performed to obtain information about caries risk in a group of children aged (6 months to 6 years) attending the specialized center of preventive and pediatric dentistry in Al-Resafa, Baghdad as well as to evaluate the relation between the risk assessment score with different indicators.

Studies on risk markers for caries in preschool youngsters have focused on child oral health habits related to caries development in children, and child-level impacts. Noticeable plaque [16, 17], early colonization via caries-related microbes [18], the presence of mutans streptococci [19-22], frequent exposure of sweetened beverages [17, 23, 24], inconsistent tooth brushing [25] have all been related to caries advancement in preschool children. Children with dental tension and behavior management issues are accounted for having more carious surfaces and more missed dental appointments than other children,[26-29] and missing dental appointments has been related to dental caries in youngsters.[30]

The present study showed that most of the participants were in moderate-risk of developing dental caries followed by low-risk and finally high-risk. The study demonstrated that most children were not exposed to the fluoride application, regular teeth brushing, and not having special health care needs. Moreover, less number of children in the study had missing teeth due to caries and visible plaque but frequent exposure to dietary sugar and refined carbohydrates. Chaffee et al. found that the risk group was strongly connected with follow up caries, which expanded from low, moderate to high/extreme risk patients.[31] The higher number of mothers in this study and their children had new carious lesions, incipient carious lesions, and restorations in the last two years. There were significant relations between the caries risk score and the caries

experience of mother, caries risk score, and the visual and incipient caries of the children which were mostly concentrated in the moderate-risk group. This is due to the lack of parental awareness as most mothers thought that dental visits are important only in case of dental pain in our community; besides frequent exposing to sugary snacks, drinks, refined carbohydrate, inappropriate bottle feeding, lack of periodic dental recalls and care, no community water fluoridation and tooth brushing wrong technique or inappropriate use of fluoridated toothpaste. Weintraub et al. (2010) found that mothers with untreated dental caries significantly increased caries severity in children by 3 surfaces and nearly twice the chance for having untreated dental caries.[32] Al-Zahrani et al. (2014) concluded that the education of mothers in several aspects and areas was needed especially regarding diet, first dental appointment, and feeding. [33]

This study showed that there was a significant relation between caries risk assessment and exposure to the fluoride as less than half of the total sample had fluoride mainly by professional fluoride application topically who were at moderate-risk of developing dental caries compared to those not exposed to fluoride application. This was because of not having fluoridated communal or school water fluoridation in our country, moreover the lack of parental knowledge for the importance and the role of the fluoride in caries prevention. This comes in agreement with Twetman et al. who found that the caries predictive ability decreased with increasing fluoride exposure in 4-5 years old children. [34]

The study demonstrated that there was a significant relationship between having snacks and/or sugary drinks frequently or prolonged between-meal per day with the caries risk assessment score and was found mostly in the moderate-risk group. This was due to the lack of parental knowledge and guidance and exposing their children to snacks like sweets, chips (potatoes), etc. frequently at different times of the day with poor oral hygiene habits like no or inappropriate brushing. Burt et al. concluded that children grouped with high caries risk had more sweets intake compared to children in the low-risk group.[35] Moynihan et al.(2005) found that the association between the numbers of caries was counted as the addition of DFS and DMFS indices and intake of cariogenic food in a group of six

months to 10-year-old children, which are mostly at low-risk of caries.[36]

A significant relation of brushing and insignificant relation of visible plaque with caries risk score were found in the current study. This was reasoned to the parents' ignorance of the correct way and patterns of teeth brushing or no brushing as more than half of the total sample answered, which would be conveyed to their children as parents would be the role models to their children. Besides the lack of oral health education programs and mass media oral health promotion messages regarding the importance of starting teeth brushing from the tooth eruption time, the right techniques to brushing, the definition of dental plaque to the parents and children as it is considered a causative factor of dental decay and control of plaque is a major part in caries prevention and the use of toothpaste containing fluoride. Harrera et al. found that there were relationships between dental caries of deciduous teeth and dental plaque, brushing teeth, and having access to preventive dental service and also found that the visible dental plaque increased the caries index value and that consistent and regular tooth brushing decreased it.[37]

Less number of participants in the study had missing teeth due to caries, but there was a significant relationship between the caries risk score and teeth extracted due to dental caries. Most parents in our community need to be educated about the stages of dental caries and the consequences after losing teeth due to dental lesions progression whether for deciduous or permanent teeth, explaining to them the dental plaque and its role and the importance of good oral hygiene as a routine on daily basis.

In this study, an indicator of special health care needs was excluded for not having eligible programs in Iraq and no established patient records of receiving regular dental care; for this was replaced by regularly brushing. There were a higher number of participants who were irregularly brushing their teeth but no significant relationship between this indicator and caries risk scores was found. This was because of the lack of oral health education to know the right way, frequency, and the importance of teeth brushing as most people in our community either irregularly brushing or do no brushing. Pita-Fernandez et al. (2010) found that the dental caries prevalence is less by 62% in children who brush their teeth more frequently

during the day as compared to those who do not brush their teeth at all. [39]

CONCLUSION

Caries risk assessment is an important tool to target the risk group, to figure out the risk factors, and to implement the proper treatment plans and programs in dental caries prevention. Most children had bad dental habits with moderate-low caries risk scores in this study. The children's oral health is affected by their mothers' oral health habits and knowledge. There is a need to implement more programs for oral health education and promotion for parents on community-level regarding brushing, dietary control, fluoride, periodic recalls for the dentist, the plaque control, and tooth loss due to caries consequences.

Recommendations:

1. Using the same methodology, the same study can be done with covering other regions of the country with specialized centers, schools, kindergartens, and adults with a larger sample size.
2. To perform a study about the relation between the caries risk score and the counts of Mutans Streptococci, Lactobacilli, and salivary flow rate.
3. A study to compare with other methods of caries risk assessment tools.
4. Conducting a study to measure the caries risk score in children with various special needs.

Conflict of interest: None.

REFERENCES

1. World Health Organization (WHO) (2017). Sugars and dental caries. WHO Department of Nutrition for Health and Development.
2. Rathee M, Sapra A. Dental Caries. [Updated 2020 Jun 3]. In: StatPearls [Internet]. Treasure Island (FL):StatPearls Publishing; 2020.
3. Filstrup SL, Briskie D, da Fonseca M, Lawrence L, Wandera A, Inglehart MR. Early childhood caries and quality of life: child and parent perspectives. Pediatr Dent. 2003;25: 431–440.
4. Edelstein BL. Disparities in oral health and access to care: findings of national surveys. Ambul Pediatr. 2002;2:141–147.
5. Petersen PE. The World Oral Health Report 2003: continuous improvement of oral health in the 21st century–the approach of the WHO Global Oral Health Programme. Comm. Dent Oral Epidemiol. 2003;31:3–23.
6. Dye BA, Tan S, Smith V, Lewis BG, Barker LK, Thornton-Evans G, Eke PI, Beltrán-Aguilar ED, Horowitz AM, Li CH. Trends in oral health status, United States, 1988-1994, and 1999-2004.External Vital Health Stat 11. 2007;(248):1-92.
7. Selwitz RH, Ismail AI, Pitts NB. Dental caries. Lancet 2007, 369(9555): 51-9.
8. Kamolmatyakul S, Saiong S.Oral health knowledge, attitude, and practices of parents attending Prince of Songkla University Dental Hospital. InterJ Health Promot Educ. 2007; (45):111‑3.
9. Featherstone JD. Caries prevention and reversal based on the caries balance. Pediatr Dent. 2006, 28(2): 128-32.
10. Anusavice K. Clinical decision-making for coronal caries management in the permanent dentition. J Dent Educ. 2001; 65(10):1143-1146.
11. American Academy of Pediatric Dentistry, Council on clinical affairs. Policy on the use of a caries risk assessment tool (CAT) for infants, children, and adolescents Pediatr Dent. 2002; 25:18.
12. Hurlbutt M. CAMBRA: Best Practices in Dental Caries Management. Penn Well designates this activity for 3 Continuing Educational Credits, October 2011.
13. Hunter M, Rodd H. History, examination, risk assessment, and treatment planning: Pediatric dentistry, 4th edition, Oxford University Press, 2012.
14. Fontana M. The clinical, environmental, and behavioral factors that foster early childhood caries: Evidence for caries risk assessment. Pediatr Dent. 2015; 37(3):217–25.
15. Okunseri C, Gonzalez C, Hodgson B. Children's oral health assessment, prevention, and treatment. Pediatr Clin North Am. 2015; 62(5):1215–26.
16. Wendt LK, Hallonsten AL, Koch G, Birkhed D. Oral hygiene in relation to caries development and immigrant status in infants and toddlers. Scand J Dent Res. 1994; 102:269-73.
17. Declerck D, Leroy R, Martens L, Lesaffre E, Garcia-Zattera MJ, Vanden BS, et al. Factors associated with prevalence and severity of caries experience in preschool children. Comm Dent Oral Epidemiol. 2008; 36:168-78.
18. Alaluusua S, Malmivirta R. Early plaque accumulation - a sign for caries risk in young children. Comm Dent Oral Epidemiol. 1994; 22:1-6.
19. Grindefjord M, Dahllöf G, Nilsson B, Modéer T. Prediction of dental caries development in 1year-old children. Caries Res. 1995; 29:343-8.
20. Grindefjord M, Dahllöf G, Nilsson B, Modéer T. Stepwise prediction of dental caries in children up to 3.5 years of age. Caries Res. 1996; 30:256-66.
21. Pienihakkinen K, Jokela J, Alanen P. Assessment of caries risk in preschool children. Caries Res. 2004; 38:156-62.
22. Warren JJ, Weber-Gasparoni K, Marshall TA, Drake DR, Dehkordi-Vakil F, Kolker JL, et al. Factors associated with dental caries experience in 1-year-old children. J Public Health Dent. 2008; 68:70-5.
23. Karjalainen S, Soderling E, Sewon L, Lapinleimu H, Simell O, A prospective study on sucrose consumption, visible plaque and caries in children from 3 to 6 years of age. Comm Dent Oral Epidemiol. 2001; 29:136-42.

24. Rodrigues CS, Sheiham A. The relationships between dietary guidelines, sugar intake, and caries in primary teeth in low-income Brazilian 3-year-olds: a longitudinal study. Inter J Paediatr Dent. 2000; 10:47-55.

25. Peres MA, Latorre MRDO, Sheiham A, Peres KG, Barros FC, Hernandez PG, et al. Social and biological early life influences on the severity of dental caries in children aged 6 years. Comm Dent Oral Epidemiol. 2005; 33:53-63.

26. Klingberg G, Berggren U, Carlsson SG, Norén JG. Child dental fear: cause-related factors and clinical effects. Eur J Oral Sci. 1995; 103:405-12.

27. Milsom KM, Tickle M, Humphris GM, Blinkhorn AS, The relationship between anxiety and dental treatment experience in 5-year-old children. Br Dent J. 2003; 194:503-6.

28. Wogelius P, Poulsen S. Associations between dental anxiety, dental treatment due to toothache, and missed dental appointments among six to eight-year-old Danish children: a cross-sectional study. ActaOdontolScand. 2005; 63:179-82.

29. Klingberg G, Vannas LL, Bjarnason S, Norén JG. Dental behavior management problems in Swedish children. Comm Dent Oral Epidemiol. 1994; 22:201-5.

30. Wang NJ, Aspelund GØ. Children who break dental appointments. Eur Arch Paediatr Dent. 2009; 10:11-4.

31. Chaffee BW, Featherstone JDB, Gansky SA, Jing Cheng, Ling Zhan, Caries Risk Assessment Item Importance: Risk Designation and Caries Status in Children under Age 6. JDR Clin Trans Res. 2016;1(2):131-142.

32. Weintraub JA, Prakash P, Shain SG, Laccabue M, Gansky SA. Mothers' Caries Increases Odds of Children's Caries J Dent Res. 2010; 89(9): 954–958.

33. Al-Zahrani AM, Al-Mushayt AS, Otaibi MF, Wyne AH, Knowledge and attitude of Saudi mothers towards their preschool children's oral health. Pak J Med Sci. 2014;30(4):720–724.

34. Twetman S, Petersson LG. Prediction of caries in pre-school children in relation to fluoride exposure. Eur J Oral Sci. 1996;104:523-528.

35. Burt BA, Eklund SA, Morgan KJ, Larkin FE, Guire KE, Brown LO, Weintraub JA, The effects of sugars intake and frequency of ingestion on dental caries increment in a three-year longitudinal study. J Dent Res. 1988; 67(11):1422–1429.

36. Moynihan PJ, The role of diet and nutrition in the etiology and prevention of oral diseases. Bull World Health Organ. 2005;83(9):694–699.

37. Herrera MS, Medina-Solis CE, Minaya-Sánchez M, Pontigo-Loyola, Rodelo JF, Granillo HI, Santillana RR, Maupomé G. Dental plaque, preventive care, and tooth brushing associated with dental caries in primary teeth in schoolchildren aged 6–9 years of Leon, Nicaragua. Med Sci Monit. 2013;19:1019–1026.

38. Eigbobo JO, Gbujie DC, Onyeaso CO. Causes and pattern of tooth extractions in children treated at the University of Port Harcourt Teaching Hospital. Odontostomatol Trop. 2014;37(146):35-41.

39. Pita-Fernández S, Pombo-Sánchez A, Suárez-Quintanilla J, Novio-Mallón S, Rivas-Mundiña B, Pértega-Díaz S. Clinical relevance of tooth brushing in relation to dental caries. Aten Primaria. 2010;42(7):372-9

Table (1): Distribution of the participants according to risk criteria:

		Freq.	percent
fluoride exposure	yes	36	45.00%
	no	**44**	**55.00%**
brushing	yes	34	42.50%
	no	**46**	**57.50%**
special health care needs	yes	3	3.75%
	no	**77**	**96.25%**
missing teeth due to caries	yes	29	36.25%
	no	51	63.75%
visible plaque	yes	28	35.00%
	no	52	65.00%
sugary foods or drinks	primarily at mealtimes	17	21.25%
	frequent or prolonged between-meal exposure/d	**55**	**68.75%**
	Bottle/sippy cup with other than water at bedtime	8	1.00%
caries experience of mother	no carious lesions in the last 24 months	20	25.00%
	carious lesions in the last 7-23 months	**34**	**42.50%**
	carious lesions in the last 6 months	26	32.50%
visual caries	no new carious lesions/restorations in the last 24 ms	13	16.25%
	carious lesions/restorations in the last 24 ms	**67**	**83.75%**
incipient caries	no new carious lesions in the last 24 months	30	37.50%
	carious lesions in the last 24 months	**50**	**62.50%**
Total		80	100.0%

Table (2): Distribution of the participants according to their risk assessment score.

		Frequency	Percent
Risk assessment score	low	16	20.0
	moderate	57	71.3
	high	7	8.8
Total		80	100.0
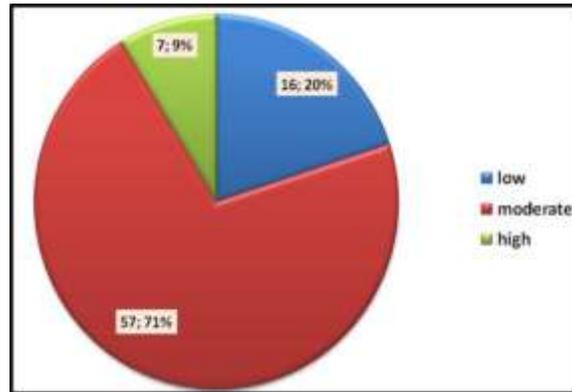
Figure 2: Distribution of the participants according to their risk assessment score.

Table (3): Association between the risk assessment score and various criteria.

		risk assessment score				p-value
		low	moderate	high	Total	
fluoride exposure	yes	8	28	0	36	**0.043**
	no	8	29	7	44	
sugary foods or drinks	primarily at mealtimes	7	10	0	17	**0.038**
	frequent or prolonged between-meal exposure\ day	9	41	5	55	
	bottle or sippy cup with anything other than water at bedtime	0	6	2	8	
caries experience of mother	no carious lesions in the last 24 months	10	9	1	20	**0.001**
	carious lesions in the last 7-23 months	6	25	3	34	
	carious lesions in the last 6 months	0	23	3	26	
brushing	yes	10	24	0	34	**0.020**
	no	6	33	7	46	
special health care needs	no	16	54	7	77	0.533
	yes	0	3	0	3	
visual caries	no new carious lesions or restorations in last 24m	9	4	0	13	**0.000**
	carious lesions or restorations in the last 24 m	7	53	7	67	
incipient caries	no new carious lesions in the last 24 months	15	14	1	30	**0.000**
	carious lesions in the last 24 months	1	43	6	50	
missing teeth due to caries	no	11	40	0	51	**0.001**
	yes	5	17	7	29	
visible plaque	no	13	34	5	52	0.259
	yes	3	23	2	28	
Total		16	57	7	80	

الخلاصة:

مقدمة: تتأثر عملياتالحفاظ على صحة الفم لدى الأطفال و نتائجها بالمعرفة و المعتقدات لدى الابوين، والتي تؤثر على صحة ونظافة الفم وعادات الأكل الصحية ايضا..

الأهداف: لتقييم مخاطر التسوس لدى الأطفال الذين تتراوح أعمارهم بين 6 أشهر و 6 سنوات في المركز التخصصي لطب الأسنان الوقائي و طب أسنان الأطفال في الرصافة، بغداد.

الطريقة: دراسة مقطعية أجريت في مركز طب الأسنان التخصصي في الرصافة للفترة من 5/15 - 6/15 2018، وتم اخذ عينة 80 طفلاً و تم تقييمهم باستخدام أداة تقييم مخاطر تسوس الأسنان القياسية للأكاديمية الأمريكية لطب أسنان الأطفال

النتائج: تم اشراك 80 طفلاً مسجلين في هذه الدراسة، النسبة الأكبر منهم لم يتعرضوا للفلورايد 44(55٪)، لا يقومون بتنظيف الاسنان بالفرشاة 46(57.50٪)، ليس لديهم احتياجات رعاية صحية خاصة 77(96.25٪)، ليس لديهم أسنان مفقودة بسبب التسوس 51(63.75٪)، لم يكن لديهم ترسبات مرئية للصفيحة الجرثومية 52(65٪)، فترة التكرر أو طول الفترة بين التعرض للوجبة الغذائية في اليوم 55(68.75٪)، نسبة الأمهات مع اسنان مصابة بآفات نخرية في آخر 7-23شهرًا 34(42.50٪)، او كان لديهم آفات نخرية مرئية أو ترميمات في الـ 24 شهرًاالماضية 67(83.75٪) بينما الآفات النخرية الأولية في الـ 24 شهرًا الماضية كانت 50(62.50٪). كانت معظم درجات تقييم المخاطر للمشاركين معتدلة 57(71.3٪)، تليها مخاطر منخفضة 16 (20٪) ،بينما كان المشاركون ذوو الخطورة العالية 7 (8.8) ،مع وجود علاقة إحصائية ذات دلالة بين درجة تقييم المخاطر والتعرض للفلورايد (p=0.043) ،أطعمة أو مشروبات سكرية (p=0.038) ،تسوس اسنان الأم (p=0.001) ،تفريش الاسنان (p=0.020) تسوس مرئي (p=0.000) ،تسوس بدائي (p=0.000) ،أسنان مفقودة بسبب تسوس الأسنان (p=0.001) ،ولكن ليس ذات دلالة إحصائية مع احتياجات الرعاية الصحية الخاصة (p=0.533) صفيحة جرثومية مرئية (p=0.259)

الاستنتاج: كان لدى معظم الأطفال عادات سيئة في الأسنان مع درجة مخاطر معتدلة إلى منخفضة.