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Potential Impact of Dietary Habits, Body Mass Index and Family Function on Early Child Hood Caries Among12to36 Month-Old Childrenin A Rural Area Of Egypt

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ABSTRACT

Aim: Early Childhood Caries (ECC) is widespread disease throughout the world. Changing diets and habits are also contributing to the disease's fast spread in low- and middle-income nations. In many nations, ECC is commonly not treated, which causes discomfort, pain and a negative effect on general health, growth and development, and the quality of life for kids, their families, and even communities. ECC is also a financial, social, and medical burden on world public health. The aim of this study was to identify early childhood caries (ECC) incidence and risk factors among toddlers in Upper Egypt. **Subjects & methods:** A total of 139 mother-child pairs (60 male, 79 female) were hired at the governorates of Qena and Luxor. In accordance with WHO recommendations, data on ECC and maternal caries were collected. An interview questionnaire was used to evaluate mothers' socioeconomic level, literacy, and parenting styles. **Results:** the association between the ECC prevalence and sociodemographic variables shows that there is a significant relationship between ECC and age ($p<0.01$). Also, there is a significant relationship between ECC and BMI ($p<0.05$) whereas there is no significant association between ECC and gender i.e. ECC and gender do not appear to be significantly correlated, though. **Conclusion:** Given the relatively high prevalence of ECC in Upper Egypt, it is critical to review public dental health policies and develop effective strategies to encourage changes in children's oral health behavior in order to prevent the disease's spread and worsening. Meaning that preventing the spread and aggravation of the disease depends on public awareness and the development of effective strategies to monitor the oral health of children and their families.

KEYWORDS

Early childhood caries;
Oral health, Maternal factors,
Risk factors Prevalence,
Preschool child

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INTRODUCTION

Caries is a biofilm (plaque)-induced acid that demineralizes enamel or dentin. Early childhood caries (ECC) can be defined as a condition in which any primary tooth in a child 71 months of age or younger has one or more decaying (noncavitated or cavitated lesions), missing (due to caries), or filled surfaces.

Understanding how caries develops and creating better prevention methods are crucial since the condition is communicable and contagious.

Infants mostly acquire cariogenic bacteria. Generally, there are two main kinds of pathogenic oral bacteria: those that cause periodontitis and those that cause dental caries, such as mutans streptococci (MS), from saliva from their mothers. Vertical transmission is the transfer of microorganisms from caregiver to child. [4,8] So, MS is a significant cause of dental caries.

Most cariogenic microorganisms are acquired by infants. Infants are more likely to contract the organism early if their mothers have high levels of MS, which is caused by untreated caries, than infants whose moms have low amounts.[9]

MS can also be spread horizontally, within family members or group, such as a daycare.[2] Eliminating saliva-sharing behaviors, such as using the same fork or pacifier for more than one child, may reduce an infant or toddler's exposure to cariogenic microorganisms.

Given that maternal variables are probably to have a direct influence on a child's oral health, maternal factors may be important in the development of ECC.[4] Mother-related factors include socioeconomic status (SES), mother's education, oral health, breast health, literacy, dietary behaviours, and frequency of dental appointments, to name a few. Pre-chewing of food for infants (mothers chew food before placing it in their child's mouth), the introduction of dental hygiene practises later than recommended, particular breast- and bottle-feeding methods, and high sugar intake in young children are all aspects of child rearing that may increase the risk of ECC.[5]

One factor that may serve as a mediator in the relationship between social situations, oral health behaviours, and child oral health is the home environment. The structure of the family is also connected to children's dental health. Greater levels of caries were seen among children from single-parent households, those who lived in bigger households, and those who were born in higher birth orders.[6,7]

The primary dentition is normally completed by the time a kid is three years old, with the mandibular main central incisors emerging initially at six months after birth.[8] Primary teeth erupt throughout the early years of life, at a period of active oral function development. This period is also marked by a change from a diet that consists only of liquids (mostly milk) to one that also include solid meals.[9] Early childhood may also be a time when dental caries is at risk due to child feeding practices, poor oral care, and hygiene as well as a lack of fluoride.[4]

ECC often develops clinically on its own within the first two years of life and initially affects the maxillary primary central incisors.[10] Timing of tooth emergence and unhealthy eating habits have an impact on children's dental caries patterns. Age is therefore considered to be a significant factor affecting the occurrence of dental caries in children.[11] Parents frequently concern about dental health precautions despite the fact that caries is widespread, and poor oral health is frequently linked to low socioeconomic position.[12] Dental caries may only be avoided by addressing and modifying the underlying etiological causes.[13,14]

ECC is a serious health problem that affects practically every kid in Egypt; it is claimed that 60% to 90% of school-aged children suffer from this chronic condition.[15,16] This proportion varies widely by population, with underdeveloped nations, especially the Middle East, having a substantially greater prevalence of dental caries than wealthy developed countries.[17,18]

Despite the significant prevalence of dental caries in the Egyptian population, few epidemiological researchs on dental caries in Egyptians have been published. Furthermore, the great majority of available data is grey literature that cannot be retrieved using standard traditional search engines.[19,23] In conjunction with the Egyptian Ministry of Health, WHO performed an epidemiological research on Egypt's oral health condition in 2014.[24] In 2014, WHO conducted an epidemiological study on

Egypt's oral health situation in collaboration with the Egyptian Ministry of Health.[25,26]

In the field of paediatric dentistry, dental caries is regarded as a major health problem; as its prevention and management necessitate different approaches, this study was conducted to shed light on the situation of dental caries among a group of Egyptian children in a group of nurseries in the governorates of QENA and Luxor.

POPULATION AND METHODS

Ethical Approval and Informed Consent

The subjects in this study were recruited from the outpatients' clinics of Faculty of Oral and Dental Medicine, South Valley University and from a group of nurseries in Qena and Luxor governorates. The inclusion criteria were; Age: starting from 12- to 36 -month-old children**.**

This cross-sectional study was carried out according to the regulations of the Research Ethics Committee of the Faculty of Dentistry, South Valley University, Egypt. And ethical approval was obtained from the Ethics Committee Faculty of Medicine of South ValleyUniversity. Before the study commenced, permission was sought from the local health administrative district in Luxor and Qena and visitations permissions with the schools were obtained.

Each participant was provided with an information sheet. The purposes and processes of the study were explained and written informed consent was obtained from each mother.

Study Site and Participants:

Thestudy was conducted in two districts, Qena and Luxor Governorates from August 2022 to November 2022, Egypt. 139 mother-child (aged 12 months to three yea r s) pairs (males60 ,females79), who visited the Sidi abd Elraheem Health Center in east Qena (small administrative district) and Esna Family health center to receive health check-ups, vaccinations and medicine and from the outpatients'clinics of Faculty of oral and dental medicine, South Valley University were enrolled in the study.

The ages of the child participants from the Health Centers was confirmed by referring to the birth registration records in the Health Center and their maternal health booklets. Mother-child pairs were randomly recruited by the chiefs in each village. Mothers who were edentulous, declined consent, or who were not the main caregivers for the children were excluded, as were children with fewer than six erupted teeth and children with a major disability.

Oral Examination

Before the oral examinations began, two trained dentists performed intra-examiner calibration on 20 subjects. The oral examinations were performed at the family medical center using visual inspection under natural light in accordance with the WHO Oral Health Surveys Basic Methods.[27] Mothers' caries and the child's ECC status were assessed in either a sitting or knee-to-knee supine position. DMFT/ dmft scores were computed accordingly.

The questionnaire asked about sociodemographic background, mother-related factors, and child-rearing practices, including ECC-related dietary and oral hygiene practises. Children who needed dental care were referred to Primary Health Hospitals or the Pediatric Dentistry Department at South Valley University's Faculty of Oral and Dental Medicine.

Data analysis:

SPSS version 28 was used to enter, code, and analyze data. Frequencies and percentages were utilized to characterize the sample distribution based on the independent factors, as well as to depict the distribution of ECC based on the categories of these variables. The Chi square test was employed to determine the relationship between ECC and independent factors. Finally, logistic regression was used to identify the relevant ECC predictors.

Sample size:

The sample size was determined using the G-power programme with the following parameters: two tails, assumed odds ratio=3, Pr(Y=1|X=1) H0=0.2, level of significance 0.05, power as 0.8, R2 other X=0, and binomial distribution with parameter 0.5. The sample size determined is 131, but even the actual sample size is 139.

RESULTS

Table (1): *ECC * DMFT Cross tabulation*

			DMFT		
			No	Yes	Total
ECC	No	Count	43	61	104
		% within DMFT	78.2%	72.6%	74.8%
	Yes	Count	12	23	35
		% within DMFT	21.8%	27.4%	25.2%
Total		Count	55	84	139
		% within DMFT	100%	100%	100%

Table 1 shows the crosstabulation of ECC and DMFT. In general, almost three quarters of the sample (74.8%) are ECC free whereas the other quarter (25.2%) have ECC. For mothers with no DMFT, less than four fifths (78.2%) don't suffer ECC while more than one fifth (21.8%) have ECC while for mothers with DMFT less than three quarters (72.6%) don't have ECC while more than one quarter (27.4%) suffer from ECC.

Table 2 represents the association between the ECC prevalence and sociodemographic variables. There is a significant relationship between ECC and age ($p<0.01$). Also, there is a significant relationship between ECC and BMI ($p<0.05$) whereas there is no significant association between ECC and gender. Considering age, 24-36 months has the highest ECC prevalence (41.8%) followed by 18-23 months (15.9%) whereas 12-17 months has the lowest ECC prevalence (9.5%). Based on BMI, ECC prevalence for normal weight (48%) is greater than underweight and overweight (19% and 23.3% respectively).

Table (2) *Association between ECC and sociodemographic characteristics (n=139)*

	Number (%)	ECC prevalence (%)	p-value
Age			
12-17 months	21 (15.1)	2 (9.5)	0.001
18-23 months	63 (45.3)	10 (15.9)	
24-36 months	55 (39.6)	23 (41.8)	
Gender			
Male	60 (43.2)	18 (30)	0.254
Female	79 (56.8)	17 (21.5)	
BMI			
Underweight	84 (60.4)	16 (19)	0.013
Normal weight	25 (18)	12 (48)	
Overweight	30 (21.6)	7 (23.3)	

Table 3 shows the relationship between the ECC prevalence and mother's related variables. There is a significant association between ECC and all the following variables: mother's education ($p<0.001$), literacy ($p<0.05$), sugary food intake ($p<0.05$), DMFT (<0.001) and fruit intake ($p<0.001$) whereas there is no significant association between ECC being a homemaker or not, similarly there is no significant association between ECC and sugary beverage intake. ECC prevalence for below mother's education category (58.8%) is larger than middle and high categories (33.3% and 10.3% respectively). Regarding literacy, illiterate has much more ECC prevalence (50%) than literate (22.8%). For sugary food intake, Never/Rare category has greater ECC prevalence (45.2%) than several times a week or once a day or more categories (22% and 17.9% respectively). ECC prevalence for 7-22 DMFT (51.5%) is largely greater than 0 or 1-6 DMFT (21.8% and 11.8% respectively). For fruit intake, Never/Rare category has greater ECC prevalence (46.9%) than several times a week or once a day or more categories (8.5% and 31.3% respectively)

Table(3) *Association between ECC and mother's related variables (n=139)*

	Number (%)	ECC prevalence (%)	p-value
Mother's education			
Below	17 (12.2)	4 (58.8)	< 0.001
Middle	54 (38.8)	18 (33.3)	
High	68 (48.9)	7 (10.3)	
Literacy			
Literate	127 (91.4)	29 (22.8)	0.038
Illiterate	12 (8.6)	6 (50)	
Homemaker			
No	65 (46.8)	13 (20)	0.187
Yes	74 (53.2)	22 (29.7)	
Sugary food intake			
Never / Rare	31 (22.3)	14 (45.2)	0.013
Several times a week	41 (29.5)	9 (22)	
Once a day or more	67 (48.2)	12 (17.9)	
Sugary beverage intake			
Never / Rare	24 (17.3)	8 (33.3)	0.502
Several times a week	58 (41.7)	15 (25.9)	
Once a day or more	57 (41)	12 (21.1)	
DMFT			
0	55 (39.6)	12 (21.8)	< 0.001
1-6	51 (36.7)	6 (11.8)	
7-22	33 (23.7)	17 (51.5)	
Fruit and vegetables intake			
Never / Rare	32 (23)	15 (46.9)	< 0.001
Several times a week	59 (42.4)	5 (8.5)	
Once a day or more	48 (34.5)	15 (31.3)	

Table 4 illustrates the relationship between the ECC prevalence and child rearing practices. There is a significant association between ECC and bottle feeding ($p<0.05$), also whether birth was normal or caesarean ($p<0.05$) whilst there is no significant association between ECC and the following practices: breastfeeding, night breastfeeding and birth order. The entire sample didn't have toothbrushing by the first year and almost fourth of them (25.2%) have dental caries. Regarding ECC prevalence, older than 12 months has ECC prevalence (37.1%) larger than those who didn't have bottle feeding or those who had <12 months (12.9% and 17.4% respectively). Those who had normal birth have almost as twice as much ECC prevalence (33.3%) as those who had caesarean birth (17.8%).

Table(4) *Association between ECC and child rearing practices (n=139)*

	Number (%)	ECC prevalence (%)	p-value
Toothbrushing by 1st year			
No	139 (100)	35 (25.2)	-
Yes	0 (0)	-	
Breastfeeding			
No	36 (25.9)	8 (22.2)	0.736
<12 months	52 (37.4)	15 (28.8)	
> 12 months	51 (36.7)	12 (23.5)	
Night breastfeeding			
No	9 (6.5)	1 (11.1)	0.413
<12 months	54 (38.8)	12 (22.2)	
> 12 months	76 (54.7)	22 (28.9)	
Bottle feeding			
No	31 (22.3)	4 (12.9)	0.013
<12 months	46 (33.1)	8 (17.4)	
> 12 months	62 (44.6)	23 (37.1)	
Birth			
Normal	66 (47.5)	22 (33.3)	0.035
Caesarean	73 (52.5)	13 (17.8)	
Birth order			
1st	29 (20.9)	2 (6.9)	0.055
2nd	50 (36)	13 (26)	
3rd	39 (28.1)	15 (38.5)	
4th	6 (4.3)	2 (33.3)	
and after	15 (10.8)	3 (20)	

Table 5 represents the logistic regression analysis results of ECC on sociodemographic variables. The results show that gender is not a significant predictor for ECC whereas both age and BMI are. There is no significant difference in the risk of ECC between 12-17 months and 18-23 months whilst the risk of having ECC for 24-36 months is significantly higher than 12-17 months (odds ratio=6.83, p=0.015). Children with overweight isn't significantly different in the ECC prevalence from those with underweight whilst children with normal weight have larger ECC risk than those with underweight (odds ratio=3.92, p=0.005).

Table(5) *LogisticRegression of ECC on sociodemographic characteristics (n=139)*

	S.E.	p-value	odds	95% CI
Age				
0: 12-17 (ref)				
1: 18-23	0.819	0.476	1.79	0.36-8.93
2: 24-36	0.792	0.015	6.83	1.45-32.25
Gender				
Male (ref)				
Female	0.393	0.256	0.64	0.30-1.38
BMI				
Underweight (ref)				
Normal weight	0.487	0.005	3.92	1.51-10.20
Overweight	0.513	0.616	1.29	0.47-3.54

Table 6 shows the logistic regression analysis results of ECC on mother's related variables. The results show that homemaker and sugary beverage intake aren't significant predictors for ECC whereas mother's education, literacy, sugary food intake, DMFT and fruit intake are. There is no significant difference in the risk of ECC between middle and below mother's education whereas the risk of having ECC for high education is significantly lower than below education (odds ratio=0.08, p< 0.001). Considering literacy, illiterate has significantly higher ECC risk than literate (odds ratio=3.38, p=0.048). For sugary food intake ECC risk for several times a week is significantly lower than never (odds ratio=0.34, p=0.04) and the same goes for once a day or more (odds ratio=0.27, p-value=0.006). Regarding DMFT, the risk of ECC for 1-6 isn't significantly different than 0 while the risk of ECC for 7-22 is significantly higher than 0 (odds ratio=3.50, p-value=0.008). The ECC risk for fruit intake once a day or more isn't significantly different from never intaking fruit whereas the risk of ECC for several times a week is significantly lower than never intaking fruit (odds ratio=0.11, p-value< 0.001).

Table (6) *LogisticRegression of ECC on mother's related variables (n=139)*

	S.E.	p-value	odds	95% CI
Mother's education				
Below (ref)				
Middle	0.571	0.066	0.35	0.11-1.07
High	0.634	< 0.001	0.08	0.02-0.28
Literacy				
Literate (ref)				
Illiterate	0.615	0.048	3.38	1.01-11.28
Homemaker				
No (ref)				
Yes	0.401	0.19	1.69	0.77-3.71
Sugary food intake				
Never / Rare (ref)				
Several times a week	0.522	0.040	0.34	0.12-0.95
Once a day or more	0.481	0.006	0.27	0.10-0.68
Sugary beverage intake				
Never (ref)				
Several times a week	0.527	0.494	0.70	0.25-1.96
Once a day or more	0.541	0.246	0.53	0.19-1.54
DMFT				
0 (ref)				
1-6	0.544	0.161	0.47	0.16-1.36
7-22	0.474	0.008	3.50	1.38-8.86
Fruit and vegetables intake				
Never (ref)				
Several times a week	0.587	< 0.001	0.11	0.03-0.33
Once a day or more	0.472	0.160	0.52	0.20-1.30

Table (7) *LogisticRegression of ECC on child rearing practices (n=139)*

	S.E.	p-value	odds	95% CI
Toothbrushing by 1st year				
No (ref)				
Yes	-	-	-	-
Breastfeeding				
No (ref)				
<12 months	0.795	< 0.001	0.05	0.01-0.21
> 12 months	0.450	0.136	0.51	0.21-1.23
Night breastfeeding				
No (ref)				
<12 months	1.110	0.456	2.29	0.26-20.13
> 12 months	1.090	0.279	3.26	0.39-27.62
Bottle feeding				
No (ref)				
<12 months	0.662	0.596	1.42	0.39-5.20
> 12 months	0.597	0.021	3.98	1.24-12.82
Birth				
Normal (ref)				
Caesarean	0.402	0.038	0.43	0.20-0.95
Birth order				
1st (ref)				
2nd	0.801	0.052	4.74	0.99-22.78
3rd	0.803	0.008	8.44	1.75-40.74
4th	1.134	0.092	6.75	0.73-62.37
and after	0.733	0.213	3.34	0.50-22.88

Table7 shows the logistic regression analysis results of ECC on mother's related variables. The results show that night breastfeeding isn't significant predictors for ECC whereas breastfeeding, bottle feeding, birth and birth order are. Concerning breastfeeding there is no significant different in ECC risk between no category and > 12 months while the risk of ECC for <12 months is significantly lower than no category (odds ratio=0.05, p-value< 0.001). The ECC risk for bottle feeding <12 months isn't significantly different from not having bottle feeding whilst the risk of ECC for > 12 months is significantly higher than not having bottle feeding (odds ratio=3.98, p-value=0.021). The ECC risk for caesarean birth is significantly lower than normal birth (odds ratio=0.43, p-value=0.038). Regarding birth order there is no significant difference in the ECC risk between the 1st and either the 2nd, 4th and higher than 4th orders whilst the ECC risk for the 3rd is significantly higher than the 1st order (odds ratio=8.44, p-value=0.008).

DISCUSSION

ECC is a chronic, infectious illness that mostly affects children under the age of five and is a serious public health problem. It is one of the most frequent avoidable diseases, and its global incidence is rising. The interplay of cariogenic bacteria, carbohydrate exposure, inadequate feeding habits, and a range of societal conditions causes ECC. It has the potential to affect a child's well-being, learning abilities, and general quality of life.[28,29] It has social, physical, emotional, and economical ramifications on a worldwide scale.[30] The current study investigated the relationships between ECC and maternal variables in children aged 12 to 36 months in a rural area of Egypt. Because of the lack of epidemiological data for this age range, this study was confined to the cities of Qena and Luxor. Caries was widespread and severe among these Egyptian moms, and it often remained untreated. The frequency and severity of ECC in children rose dramatically with age. These findings were consistent with earlier Egyptian research.[31,32] No children had received dental treatment.

The frequency of ECC ranged between 3 and 57%, according to the findings of a systematic analysis aiming at analysing the factors of dental caries in children residing in the Middle East and North Africa (MENA) area.[33] This vast range among nations shows that ECC distribution is not homogeneous, which might be explained by genetic causes, ethnic disparities, and socioeconomic status inequalities.[34]

According to the findings of this study, the occurrence of ECC increases with age. This finding is consisted with.[35-38] Caries incidence in older

children may be increasing due to between-meal snacks, sweetened drinks, and sweets.

Dental care practise and attitude have been found as potentially impacting dental health and illnesses in youngsters. The current study looked at mothers' oral hygiene routines for their children and themselves as a risk factor for dental caries. This is due to the fact that moms play an essential role in the health of young children, who are typically unable to clean their own teeth and must rely on caregivers for day-to-day care.

In this study, 8.6% of mothers were illiterate, their caries incidence was 60.4%, and 50% of their children had ECC, indicating a definite positive association between maternal illiteracy and ECC. A similar conclusion was reported in Iran's National Oral Health Survey.[39]

Women who are illiterate will have less chances to learn from written resources, including health education materials. They are more likely to have dropped out of school at an early age, missing out on learning about proper diet, hygiene, and recommended child-rearing methods from school health lectures. Thus, increasing moms' literacy may benefit their children's dental health.

As a result, mothers become a key potential moderator of factors that may have an influence on the child's dental health in the short and long run. According to the data, the great majority of moms in the research group failed to clean their children's teeth. When the brushing habits of mothers and their children were compared, a disturbing outcome emerged. Brushing is becoming less popular among young children. The findings contrasted a Nigerian research that revealed moms have a major role in their children's care and health.[40] Improved oral hygiene in Nigerian pre-school children is connected to this mother attitude.

On the other hand, According to the findings, the older the child, the more the mothers performed dental hygiene. This discovery is compatible with [41] However, the outcomes of this study demonstrated a negative association between the frequency of mothers' own cleaning and cleaning for their children. In compared to statistics from wealthy nations, the contemporary kid population's frequency of oral washing was relatively low. Tooth brushing, which is part of the recommended oral self-care but is rarely reported for our children, is almost a norm for 1-4 year old children (85-97%) in several Nordic countries and the United States, with Scotland having the highest figure. [42,43]

Despite the lack of statistically significant differences, children whose mothers were homemakers had a lower frequency of ECC than children with working moms. Many moms have gotten professions in diverse sectors, putting their children in the care of other caregivers such as relatives or nurseries throughout the day. [44] Many of these caregivers are believed to have offered feeding bottles, sweet snacks, and cadies to children during the day, or to have purchased them from marketplaces in or near the school.

44.6% of the children in this research were still utilizing the bottle at 12 months of age. These eating habits may be contributing to the high prevalence of ECC in this community. Because grandparents and other family members care for many young children throughout the day, oral health education should target these caregivers as well as mothers.

Our findings on children's dental hygiene, on the other hand, are comparable to those published for certain Middle Eastern nations, such as Jordan. [45,46] However, it is lower than in other countries such as Poland and Hong Kong.[47,48] Our mothers had a more positive attitude, but not always better habits.

The current study's findings on feeding patterns were comparable to those reported in prior investigations.[49-54] [34,35,37-40] found that both bottle and breast feeding are risk factors for ECC. This conclusion, however, was disputed by[55], who observed that eating pattern was not related to

ECC.[56,57] According to their findings, breast feeding helps to prevent S. mutanscolonisation. Differences in results may be explained by differences in mothers' concern for their children's oral hygiene behaviours, knowledge, education, and genetics across populations.[58]

Although it is extremely advised to breastfeed for at least 24 months,[59] When done on demand or especially at night, it can lead to high ECC, especially when combined with a high sugary diet and a late initiation of brushing. [60] Males exhibited a greater incidence than females in our study, which was consistent with a study at Cairo University's Faculty of Oral and Dental Medicine in 2003-2004. [61]. Our findings, on the other hand, contradict Abd El-Monem's[62] research in Al Giza Governorate 1997, which found that girls were more impacted than males. This might be due to male children's poor dental hygiene and challenging conduct. One of the most critical concerns to examine when determining whether treatments could be practical and acceptable to address the ECC problem in Upper Egypt is a shortage of oral health workers. Many rural residents have little access to dental treatments, and very few schools have any form of oral health programme.

A reduction in caries should logically have a good influence on a child's capacity to eat, sleep, and learn properly; future study will address this research topic.

It was observed that there was a link between family efforts and childhood dental caries, which might have been mediated by oral hygiene practises. Family responsibilities explained just a portion of the socioeconomic variations in children's dental health. Organization proved to be the most important feature of family functioning that impacted how well children experienced caries.

According to the current study and other recent Egyptian studies, therapies that begin when children join school are too late to prevent the majority of primary tooth decay. As a result, moms and preschool children should be addressed during pregnancy and the preschool years. Interventions to enhance oral health should include not just dental practitioners, but also other health workers such as midwives, nurses, and health volunteers who have regular contact with pregnant women and infants and have the chance to intervene, such as during immunisation visits.

CONCLUSIONS

Oral health has long been recognized as an important aspect of overall health and quality of life. As a result, both oral disease prevention and oral health promotion should be integrated into chronic disease prevention and overall health promotion programmes. Given the relatively high prevalence of ECC in Upper Egypt, it is critical to review public dental health policies and develop effective strategies to encourage changes in children's oral health behavior in order to prevent the disease's spread and worsening.

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التأثير المحتمل للعادات الغذائية ، مؤشر كتلة الجسم والوظيفة الأسرية على تسوس قلنسوة الطفل المبكرة بين 12 إلى 36 شهرًا في إحدى المناطق الريفية في مصر

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الملخص :

الهدف: تسوس الاسنان بالطفولة المبكرة (ECC) هو مرض منتشر في جميع أنحاء العالم. تساهم النظم الغذائية والعادات المتغيرة أيضًا في سرعة انتشار المرض في الدول منخفضة ومتوسطة الدخل. في العديد من الدول ، لا يتم علاج ECC بشكل عام ، مما يسبب عدم الراحة والألم والتأثير السلبي على الصحة العامة والنمو والتنمية ونوعية الحياة للأطفال وعائلاتهم وحتى المجتمعات. يمثل علاج الطوارئ في حالات الطوارئ عبئًا ماليًا واجتماعيًا وطبيًا على الصحة العامة في العالم. كان الهدف من هذه الدراسة هو تحديد حدوث تسوس الطفولة المبكرة وعوامل الخطر بين الأطفال الصغار في صعيد مصر

المواد والأساليب : تم توظيف 139 زوج من أم وطفل (60 ذكر و 79 أنثى) بمحافظتي قنا والأقصر. وفقًا لتوصيات منظمة الصحة العالمية ، تم جمع بيانات عن رعاية الطفولة المبكرة وتسوس الأمهات. تم استخدام استبيان مقابلة لتقييم المستوى الاجتماعي والاقتصادي للأمهات ، ومحو الأمية ، وأنماط الأبوة والأمومة.

النتائج: يظهر الارتباط بين انتشار تسوس الاسنان بالطفولة المبكرة والمتغيرات الاجتماعية الديموغرافية أن هناك علاقة كبيرة بين ECC والعمر (P <0.01). أيضًا ، هناك علاقة ذات دلالة إحصائية بين تسوس الاسنان بالطفولة المبكرة ومؤشر كتلة الجسم (P <0.05) بينما لا يوجد ارتباط كبير بين تسوس الاسنان بالطفولة المبكرة والجنس. لا يبدو أن هناك ارتباطًا كبيرًا بين تسوس الاسنان بالطفولة المبكرة والجنس ، على الرغم من.

الخلاصة: نظرًا للانتشار المرتفع نسبيًا لـ تسوس الاسنان بالطفولة المبكرة في صعيد مصر ، فمن الأهمية بمكان مراجعة السياسات العامة لصحة الأسنان ووضع استراتيجيات فعالة لتشجيع التغييرات في سلوك صحة الفم لدى الأطفال من أجل منع انتشار المرض وتفاقمه. بمعنى أن منع انتشار المرض وتفاقمه يعتمد على الوعي العام ووضع استراتيجيات فعالة لرصد صحة الفم لدى الأطفال وأسرهم.

الكلمات المفتاحية: تسوس الطفولة المبكرة صحة الفم ، عوامل الأم ، عوامل الخطر انتشار ، أطفال ما قبل المدرسة