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Oral Problems and Self-Confidence in Preschool Children

Monalisa Cesarino Gomes[1], Matheus França Perazzo[1], Érick Tássio Neves[1], Carolina Castro Martins[2], Saul Martins Paiva[2], Ana Flávia Granville-Garcia[1]

[1]Postgraduate Program in Dentistry, UEPB – Universidade Estadual da Paraíba, Campina Grande, PB, Brazil
[2]Department of Paediatric Dentistry and Orthodontics, UFMG – Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brazil

Correspondence: Ana Flávia Granville-Garcia, Rua Capitão João Alves de Lira, 1325/410, Prata, Campina Grande, PB, Brasil. Tel:+55-83-3315-3326. e-mail: anaflaviagg@hotmail.com

The aim of the present study was to evaluate the impact of clinical oral factors, socioeconomic factors and parental sense of coherence on affected self-confidence in preschool children due to oral problems. A cross-sectional study with probabilistic sampling was conducted at public and private preschools with 769 five-year-old children and their parents/caretakers. A questionnaire addressing socio-demographic characteristics as well as the Scale of Oral Health Outcomes for Five-Year-Old Children (SOHO-5) and the Sense of Coherence Scale (SOC-13) were administered. The dependent variable was self-confidence and was determined using the SOHO-5 tool. Dental caries (ICDAS II), malocclusion and traumatic dental injury (TDI) were recorded during the clinical exam. Clinical examinations were performed by examiners who had undergone training and calibration exercises (intra-examiner agreement: 0.82-1.00 and inter-examiner agreement: 0.80-1.00). Descriptive statistics and Poisson regression analysis were performed (α=5%). Among the children, 91.3% had dental caries, 57.7% had malocclusion, 52.8% had signs of traumatic dental injury and 26.9% had bruxism. The following variables exerted a greater negative impact on the self-confidence of the preschool children due to oral problems: attending public school (PR=2.26; 95% CI: 1.09-4.68), a history of toothache (PR=4.45; 95% CI: 2.00-9.91) and weak parental sense of coherence (PR=2.27; 95% CI: 1.03-5.01). Based on the present findings, clinical variables (dental pain), socio-demographic characteristics and parental sense of coherence can exert a negative impact on self-confidence in preschool children due to oral problems.

Key Words: oral health, preschool child, sense of coherence, quality of life.

Introduction

Preschool children often have oral problems, such as dental caries, traumatic dental injury (TDI) and malocclusion, which may exert a negative impact on oral health-related quality of life (1,2). Thus, the measurement of oral health and quality of life should be key outcomes when evaluating oral health programmes. Studies have demonstrated that oral problems can lead to functional limitations and exert a negative impact on families (3,4). However, no previous study evaluated oral health-related self-confidence among preschool children. In this age group, a child is still emotionally maturing, and so psychosocial factors such as self-confidence should be clearly elucidated for the preservation of his or her future health (5,6).

The self-confidence of a child may be affected by poor oral health. Oral problems exert an impact on both functional and psychosocial (quality of life and sense of coherence) aspects of life, even at an early age (5). The concept of oral health-related quality of life (OHRQoL) corresponds to the impact that adverse oral conditions have on daily functioning and well-being. In recent years, the assessment of quality of life has become an integral part of evaluating health programs. Self-confidence related to oral health is an aspect that forms part of the OHRQoL and can illustrate whether oral health conditions interfere with the social interaction of a child (5). Moreover, good oral health behaviors have been related to high self-confidence, whereas an inadequate behavioral pattern with regard to health promotion has been related to affected self-confidence (7).

Sense of coherence (SOC) has previously been evaluated to determine its influence on oral health (8). The core concept of SOC is to explain why some individuals remain healthy, especially after experiencing highly and long-lasting stressful life situations, while others experience disease and illness (8,9). Individuals with a strong SOC assess situations as non-stressful, perceive available recourses of action and feel capable to use these recourses to deal with the stress and challenges of day-to-day living (9). Studies have addressed this issue to reveal possible associations between parental SOC and different aspects of the oral problems of a child, especially as regards the lifestyle behaviors and health perceptions (8). SOC can also exert an influence on the perception of parents/caretakers regarding

a child's self-confidence. Thus, evaluating SOC could complement information derived from clinical indicators to enable the better planning of healthcare services in an attempt to overcome the dichotomy between health and illness (10).

Therefore, due to the importance of studies that evaluate psychosocial issues as well as oral health conditions, the aim of the present study was to evaluate the impact of clinical oral factors, socioeconomic factors and parental sense of coherence on affected self-confidence in children due to oral problems in a preschool-based sample.

Material and Methods

Ethical Issues

This study was conducted in accordance with the Declaration of Helsinki and was independently reviewed and approved by the Human Research Ethics Committee of the State University of Paraiba, Brazil, under protocol number 38937714.0.0000.5187. The parents/caretakers received clarifications regarding the objectives of the study and signed a statement of informed consent.

Sample Characteristics

A representative, school-based, cross-sectional study was conducted with a sample of 769 pairs of parents/caretakers and five-year-old children enrolled in private and public preschools in the city of Campina Grande, Brazil. The participants were selected from a total population of 14,360 children in this age group. Campina Grande (estimated population: 405,072) is an industrialised city in north-eastern Brazil and is divided into six administrative districts. The city has significant cultural, social and economic disparities, an average income per capita of US$110, a Human Development Index of 0.72 and a poverty rate of 58.88%.

A two-stage sampling strategy was employed to ensure representativeness. In the first stage, preschools were randomly selected from each health district. In the second stage, pairs of children and parents/caretakers were randomly selected from each preschool. The sample size was calculated based on a 5% margin of error, a 95% confidence level and 50% prevalence rate of affected self-confidence among the children due to oral problems. The prevalence rate of 50% was employed to increase the power and because this value gives the largest sample regardless of the actual prevalence. A correction factor of 1.6 was applied to compensate for the design effect. Twenty of the 129 public preschools and 28 of the 134 private preschools were randomly selected. The minimum sample size was estimated to be 615 preschool children, to which an additional 20% was added to compensate for possible dropouts, resulting in a sample of 769 preschool children.

Eligibility Criteria

To participate in the present study, the children were required to be 5 years old, enrolled in preschool, have no permanent teeth, have no history of orthodontic treatment and have no systemic diseases (based on the reports of parents/caretakers).

Training Exercise

A specialist in paediatric dentistry coordinated the theoretical step involving a discussion of the criteria for the diagnosis of the oral conditions. In the clinical step, two dentists examined 40 previously selected children at a preschool selected by convenience. This preschool was not part of the main study. Inter-examiner agreement was tested by comparing each examiner with the gold standard. The inter-examiner Kappa coefficient was calculated for dental caries (K=0.80 to 0.90), the pufa index [consequences of untreated dental caries (K=0.90 to 1.00)], TDI (K=0.88 to 0.90) and malocclusion (K=0.86 to 0.91). The intra-examiner Kappa coefficient was determined after a one-week interval, with each examiner's results compared with the previous results: dental caries (K=0.87 to 1.00), the pufa index (K=1.00), TDI (K=0.82 to 0.87) and malocclusion (K=0.94 to 1.00). Inter-examiner and intra-examiner agreement was considered very good (11).

Pilot Study

A pilot study was first conducted at two preschools (one public and one private), where the methods were applied to 45 preschool children and their parents. The results of this pilot study demonstrated that no changes to the proposed methodology were necessary.

Data Collection

The study was conducted at the randomly selected preschools in two steps: administration of the questionnaires and clinical examination of the children. Prior to the data collection process, a meeting was held at each preschool with the parents/caretakers to explain the objectives and procedures of the study. All parents/caretakers who agreed to participate signed a statement of informed consent. The questionnaires were administered on the same day as the meeting. Three questionnaires were employed – one addressing socio-demographic characteristics, the Scale of Oral Health Outcomes for Five-Year-Old Children (SOHO-5) for the evaluation of self-confidence of the children based on the reports of the parents/caretakers and the Sense of Coherence Scale (SOC-13).

The following socio-demographic characteristics were recorded: sex of child, type of preschool (public or private), monthly household income (categorized on the median, which was US$280.00), mother's schooling and the age of

the caretaker. These variables were categorized based on other studies (1,2). Issues related to oral health were also addressed, such as visits to the dentist by the children, reason for visits to the dentist and a history of toothache. These variables were evaluated in a questionnaire prepared by the researchers.

The SOHO-5 is used to evaluate oral health-related quality of life by the perceptions of parents/caretakers and preschool children (5). This questionnaire and its psychometric properties have been adapted and validated for use in Brazil (12). The SOHO-5 has a parental version and a child version. For the evaluation of self-confidence, which was considered the dependent variable, the following question from the parental version was used: "Has the self-confidence/self-esteem of your child ever been affected because of his/her teeth?" The response options offered are on a five-point scale (no = 0, a little = 1, moderate = 2, a lot = 3, a great deal = 4). This item has demonstrated satisfactory internal consistency and reliability. The answers obtained in a quantitative form were used for statistical analysis. The highest score was considered indicative of a greater negative impact on the self-confidence of the preschool children according to the reports of the parents/caretakers.

The Brazilian version of the SOC-13 consists of 13 items related to the three interrelated components of SOC; comprehensibility (five items), manageability (four items), and meaningfulness (four items). Each item was scored on a scale of 1-5 points. The items on the SOC-13 are "Do you have the feeling that you are in an unfamiliar situation and don't know what to do?", "Do you have very mixed-up feelings and ideas?", "How often do you have feelings that you're not sure you can keep under control?", "Do you have feelings inside you would rather not feel?", "Do you have the feeling that you're being treated unfairly?", "Do you have the feeling that you don't really care about what goes on around you?", "When something happened, have you generally found that (you overestimated or underestimated its importance - you saw things in the right proportion)?", "Until now your life has had (no clear goals or purpose at all - very clear goals and purpose)", "Doing the things you do every day is (a source of deep pleasure and satisfaction - a source of pain and boredom)", "Have you been surprised in the past by the behaviour of people whom you thought you knew well?", "Have people whom you counted on disappointed you?", "How often do you have the feeling that there's little meaning in the things you do in your daily life?" and "Many people sometimes feel like sad sacks (losers) in certain situations. How often have you felt this way in the past?" The final score ranges from 13 to 65, with higher scores denoting a greater capacity of adaptation to stress (13). For statistical purposes, parental SOC was dichotomized as strong or weak based on the median.

The second step of the study consisted in the clinical examinations of the children, which were conducted in classrooms of their preschools in a knee-to-knee position with a portable lamp attached to the examiner's head. Supervised brushing was first performed for the removal of plaque and to facilitate the examination, for which each child received a toothbrush, toothpaste and dental floss. All examiners used individual protection as a biosafety measure. The clinical examinations were performed using criteria established in the literature.

Dental caries was diagnosed using the International Caries Detection and Assessment System (ICDAS-II) (14), which is a scoring system ranging from 0 (absence of dental caries) to 6 points. Due to the epidemiological nature of the study, code 1 was not considered, as drying of the teeth was performed with gauze rather than compressed air. Code 2 was used for white spots and codes 3 to 6 determined different degrees of cavitation. For statistical purposes, dental caries was dichotomized as absent (code 0) or present (code≥2). The severity of dental caries was categorized as absent/white spot, low caries severity (up to 5 cavitated lesions) and high caries severity (6 or more cavitated lesions). Lesion activity was considered as follows: 1) enamel – the lesion is whitish/yellowish; the lesion is chalky (lack of lustre); the lesion may be cavitated or not; the lesion feels rough upon probing; probing may or may not lead to the discovery of a cavity; 2) dentine – the lesion may manifest itself as a shadow below the intact but demineralized enamel; if a cavity extends into the dentine, the dentine appears yellowish/brownish; dentine soft upon probing. Lesion activity was recorded when at least one active carious lesion was found (14).

The pufa index was used to evaluate the consequences of untreated caries, such as visible pulp involvement (p), ulceration caused by dislocated tooth fragments (u), fistula (f) and abscess (a) (15). For statistical purposes, the consequences of untreated dental caries were recorded as absent or present.

Traumatic dental injury (TDI) was diagnosed as enamel fracture, enamel + dentine fracture, complicated crown fracture, extrusive luxation, lateral luxation, intrusive luxation and avulsion (16). A visual inspection was also made of tooth colouration. TDI was recorded in the presence of any type of TDI or tooth discolouration. Malocclusion was recorded in the presence of at least one of the following conditions: increased overbite (>2 mm), increased overjet (>2 mm), anterior open bite, anterior crossbite and posterior crossbite (17,18). The diagnosis of sleep bruxism was performed based on the reports of parents/caretakers of an occurrence of tooth grinding

during sleep, as proposed by the American Academy of Sleep Medicine for preschool children (19) and employed in a previous study (20). Following the examinations, a fluoride varnish was applied to the children's teeth. In addition, a letter was sent to parents/caregivers describing the oral health diagnosis of the preschool children and each child received an oral hygiene kit.

Statistical Analysis

Frequency distribution of the data was determined to characterize the sample. Poisson regression analysis with robust variance was used to evaluate the statistical difference between the score of the self-confidence item (dependent variable) and the independent variables. The stepwise backward method was employed for the selection of variables with a p-value <0.20 in the bivariate analysis. Variables with a p-value <0.05 in the adjusted analyses were maintained in the final regression model. Variance inflation factors were calculated to determine the existence of collinearity among the predictors in the adjusted model. Data organization and statistical analysis were performed using the Statistical Package for Social Sciences (SPSS for Windows, version 21.0, IBM Inc., Amonk, NY, USA).

Results

A total of 769 preschool children and their parents/caretakers participated in the present study (response rate: 100%). Among the children, 38.8% were enrolled in public preschools and 61.2% were enrolled in private preschools. In the sample, 52.4% were boys and 47.6% were girls.

Table 1 displays the frequency of oral health problems among the preschool children. The prevalence of dental caries was 91.3% (32.5% white spots and 58.8% cavitated lesions). TDI was diagnosed in 52.8% of the preschool children and malocclusion was diagnosed in 57.7%. Parents/caretakers reported the occurrence of bruxism in 26.9% of the children.

Table 2 displays the results of the unadjusted and adjusted analyses for affected self-confidence due to oral problems. In the unadjusted analysis, significant differences in affected self-confidence were found with regard to type of preschool, mother's schooling, the use of dental services, reasons for visiting the dentist, tooth ache/dental pain, dental caries, caries on anterior teeth, severity of dental caries, pufa index, anterior open bite and parental sense of coherence. After the adjustments, children enrolled in public preschools had a greater probability of suffering harm to their self-confidence due to oral problems than those enrolled in private preschools (PR=2.26; 95% CI: 1.09 to 4.68). Children with a history of toothache had a greater probability of having lower self-confidence according to the reports of parents/caretakers (PR=4.45; 95% CI: 2.00 to 9.91). Moreover, a weak parental sense of coherence was related to more frequent reports of affected self-confidence in the pre-schoolers (PR=2.27; 95% CI: 1.03 to 5.01).

Discussion

In the present study, the self-confidence of children with oral problems was evaluated based on the perceptions of parents/caretakers and was lower among children enrolled in public preschools, those with a history of toothache and those whose parents/caretakers had a weak sense of coherence. Thus, besides issues related to oral health, socioeconomic factors and parental sense of coherence affect the perceptions of parents/caretakers regarding their children's self-confidence, which is an important aspect of social interactions, development and the learning process (5).

Among the socio-demographic variables, children in public preschools had a greater probability of having their self-confidence affected by oral problems. This finding may stem from the fact that severe dental caries and a history of toothache are reported more in this group (21). Moreover, there is an association between attending public school and oral health-related quality of life in preschool children (1). Thus, functioning in day-to-day life can be affected. This issue requires particular attention, as preschool children

Table 1. Frequency distribution of oral problems among preschool children

Variable	Frequency	
	n	%
Dental caries		
Absent	67	8.7
White spot	250	32.5
Cavitated lesion	452	58.8
TDI		
Absent	363	47.2
Present	406	52.8
Malocclusion		
Absent	325	42.3
Present	443	57.7
Bruxism		
Absent	556	73.1
Present	205	26.9

* n < 769 for malocclusion (n = 768) due to tooth loss that rendered diagnosis impossible and bruxism (n = 761) due to unanswered items on questionnaire

Table 2. Poisson regression in relation to affected self-confidence of preschool children due to oral problems based on reports of parents/caretakers

Characteristics	Affected self-confidence	Bivariate // Unadjusted PR*		Multivariate//Adjusted PR†	
	Mean (SD)	(95% CI)	p-value	(95% CI)	p-value
Sex of child					
Female	0.17(0.67)	1.73(0.91-3.29)	0.093	-	-
Male	0.10(0.50)	1.00		-	-
Type of preschool					
Public	0.24(0.79)	3.67(1.86-7.24)	<0.001	2.26(1.09-4.68)	0.027
Private	0.07(0.41)	1.00		1.00	
Parent's/caretaker's schooling					
≤ 8 years of study	0.27(0.83)	3.67(1.93-6.97)	<0.001	-	-
> 8 years of study	0.07(0.44)	1.00		-	-
Monthly household income					
< US$ 280,00	0.18(0.67)	1.83(0.94-3.58)	0.075	-	-
≥ US$ 280,00	0.10(0.53)	1.00		-	-
Parent's/caretaker's age					
≤ 30 years	0.16(0.66)	1.35(0.71-2.57)	0.349	-	-
> 30 years	0.12(0.56)	1.00		-	-
Use of dental services					
Yes	0.19(0.70)	2.13(1.11-4.08)	0.022	-	-
No	0.09(0.49)	1.00		-	-
Reason for visiting dentist					
Prevention	0.08(0.45)	1.00		-	-
Treatment	0.29(0.85)	3.65(1.33-10.01)	0.012	-	-
Toothache					
Yes	0.43(1.04)	9.98(5.03-19.78)	<0.001	4.45(2.00-9.91)	<0.001
No	0.04(0.31)	1.00		1.00	
Dental caries					
Present	0.14(0.62)	3.18(1.00-10.06)	0.049	-	-
Absent	0.04(0.20)	1.00		-	-
Activity of dental caries					
Active	0.16(0.64)	3.57(0.49-25.78)	0.206	-	-
Inactive	0.04(0.41)	1.00		-	-
Caries on anterior teeth					
Absent	0.08(0.44)	1.00		-	-
White spot	0.02(0.16)	0.28(0.09-0.89)	0.031	-	-
Cavitated lesion	0.32(0.92)	4.17(1.76-9.84)	0.001	-	-
Severity of dental caries					
Absent/white spot	0.04(0.34)	1.00		-	-
Low severity	0.09(0.48)	2.15(0.67-6.90)	0.195	-	-

High severity	0.30(0.86)	7.25(2.71-19.36)	<0.001	-	-
pufa index					
Present	0.50(1.14)	6.63(3.60-12.19)	<0.001	-	-
Absent	0.08(0.42)	1.00		-	-
TDI					
Present	0.11(0.54)	1.00		-	-
Absent	0.16(0.65)	1.38(0.73-2.60)	0.310	-	-
Type of TDI					
Discoloration	0.17(0.73)	1.10(0.42-2.88)	0.839	-	-
Complicated TDI	0.16(0.62)	1.02(0.34-3.05)	0.971	-	-
Uncomplicated TDI	0.08(0.42)	0.51(0.23-1.11)	0.091	-	-
Absent	0.16(0.65)	1.00		-	-
Malocclusion					
Present	0.14(0.60)	1.15(0.60-2.22)	0.664	-	-
Absent	0.12(0.59)	1.00		-	-
Anterior open bite					
Present	0.23(0.79)	2.09(1.01-4.32)	0.045	-	-
Absent	0.11(0.54)	1.00		-	-
Increased overbite					
Present	0.10(0.49)	1.00		-	-
Absent	0.12(0.57)	1.47(0.62-3.45)	0.378	-	-
Increased overjet					
Present	0.14(0.55)	1.17(0.60-2.29)	0.628	-	-
Absent	0.12(0.58)	1.00		-	-
Anterior crossbite					
Present	0.19(0.78)	1.45(0.29-7.23)	0.649	-	-
Absent	0.13(0.58)	1.00		-	-
Posterior crossbite					
Present	0.12(0.48)	1.00		-	-
Absent	0.14(0.61)	1.13(0.46-2.78)	0.777	-	-
Sleep bruxism					
Present	0.17(0.63)	1.33(0.69-2.57)	0.385	-	-
Absent	0.12(0.58)	1.00		-	-
Parental sense of coherence					
Weak	0.22(0.76)	2.96(1.52-5.76)	0.001	2.27(1.03-5.01)	0.041
Strong	0.07(0.43)	1.00		1.00	

*Unadjusted Poisson regression for independent variables and affected self-confidence of preschool children due to oral problems according to reports of parents/caretakers. †Variables incorporated into multivariate model (p<0.20): sex, type of preschool, monthly household income, mother's schooling, visits to dentist, reason for visiting dentist, toothache, dental caries, caries on anterior teeth, severity of dental caries, pufa index, type of TDI, anterior open bite and parental sense of coherence. (-): variables not selected for final adjusted model (p-value>0.05).

may be victimized or feel inferior due to oral problems (22). Moreover, this difference may also reflect difficulty of access to dental care due to the limited supply of public services and the high cost of private care for a large part of the population.

Children with a history of toothache exhibited greater harm to their self-confidence, according to the reports of parents/caretakers. Indeed, toothache is a frequent experience in this age group and has a negative impact on oral health-related quality of life (2). The literature reports functional limitations and a negative influence on social interactions due to toothache (3). Thus, the symptoms can exert a negative impact on normal daily performance and thereby affect a child's self-confidence. Moreover, the occurrence of pain can lead to a poorer perception of health by the parents/caretakers (23) and, consequently, more reports of affected self-confidence in children.

Aesthetic issues did not affect the self-confidence of the preschool children. This likely occurred due to the fact that self-confidence was reported by parents/caretakers. Indeed, parents/caretakers generally only recognize the impact of oral problems when it is evident and/or symptomatic. It is important to point out that studies that identified these results applied a different OHRQoL questionnaire with the preschool children (2,3). Studies evaluating white spots report no association with oral health-related quality of life according to the reports of parents/caretakers (2,24). Moreover, the majority of TDIs were mild and were therefore not a source of pain (1). Previous studies report that malocclusion in preschool children often goes unnoticed by parents/caregivers, probably due to absence of symptoms and the fact that children at this age are in the primary dentition phase (1,2). Children with bruxism did not obtain different scores for self-confidence, perhaps because they were in an initial phase that did not result in severe tooth wear or functional discomfort. Moreover, the diagnosis of bruxism was based solely on the reports of parents/caregivers and this problem may therefore have been underestimated, as some parents/caregivers may have been unable to recognize the habit (20).

A weak sense of coherence on the part of parents/caregivers resulted in a difference in the self-confidence scores of the preschool children. The study of SOC among populations is of considerable importance to the evaluation of health and biological behavior. Indeed, individuals with a strong SOC are more likely to exhibit self-control in their lives and thereby maintain adequate health (10). With regards to oral health in preschool children, studies demonstrated that weak parental sense of coherence is related to the occurrence of dental caries and its consequences (8) as well as more visits to the dentists (25). Probably, children with dental caries are more prone to toothaches and consequently experience a negative impact on self-confidence, which underscores the importance of identifying and modifying psychosocial factors that may have an influence on health, such as a sense of coherence.

A limitation of the present study was the evaluation of the self-confidence of preschool children based only on the reports of parents/caretakers. In this age group, however, children are dependent on caretakers, who can report perceptions with regard to the health of their children. To date, there are no questionnaires designed for the evaluation of oral health-related self-confidence in preschool children. Thus, an item from a previously validated scale was employed (SOHO-5) (12). SOHO-5 is the only validated questionnaire related to OHRQoL for preschool children that contains a specific item about self-confidence (5,12). A single-item rating of perceived oral health is particularly appropriate for obtaining information from children's parents. Other limitations regard the cross-sectional design, which does not allow the determination of cause and effect, and possible information bias. However, measures were taken to minimize these limitations, like the pilot study and use of validated questionnaires. Moreover, the present study involved a sample of adequate size and multivariate analysis was performed, meaning that the results are reliable. Studies that evaluate self-confidence are rare and this can be considered an important aspect in the identification of vulnerable groups. The high response rate can be attributed to the feedback provided by the study to the participants, which included the letter describing the oral diagnosis of each child, the distribution of oral hygiene kits and the topical application of fluoride after the examination. Moreover, the study was supported by all the preschools.

Therefore, it may be concluded that toothache, studying in public preschools and parental sense of coherence exert a negative impact on self-confidence in preschool children due to oral problems. Studies that evaluate the impact of oral problems on psychological aspects of children can make an important contribution to oral health programs. Therefore, parents, teachers and health professionals should be aware of the aesthetic characteristics of preschool children, in order to prevent an impact on self-confidence in the future, since this issue may be associated with self-confidence issues in older age groups. Health promotion strategies and health policies should be formulated to improve the quality of life of preschool children, who are in an important phase with regard to healthy growth and development.

Resumo

O presente estudo teve como objetivo avaliar a interferência de fatores clínicos bucais, socioeconômicos e senso de coerência (dos pais) no prejuízo

de autoconfiança devido alterações de saúde bucal em pré-escolares. Um estudo transversal com amostra probabilística foi realizado em pré-escolas públicas e privadas com 769 crianças de 5 anos de idade e seus responsáveis. Questionários de variáveis sociodemográficas, o Scale of Oral Health Outcomes for Five-Year-Old Children (SOHO-5) e Sense of Coherence Scale (SOC–13) foram aplicados na amostra. A variável dependente foi autoconfiança e coletada a partir do questionário SOHO-5. Cárie dentária (ICDAS II), má oclusão e traumatismo dentário foram registrados durante o exame clínico. Exames clínicos foram realizados nos pré-escolares por examinadores previamente calibrados (acordo intra-examinador: 0,82-1,00 e acordo inter-examinador: 0,80-1,00). Análise descritiva e Regressão de Poisson foram aplicadas (α=5%). Entre as crianças avaliadas, 91,3% apresentaram cárie dentária, 57,7% maloclusão, 52,8% traumatismo dentário e 26,9% bruxismo. As seguintes variáveis mostraram uma maior média de prejuízo na autoconfiança dos pré-escolares devido alterações de saúde bucal: frequentar pré-escola pública (PR=2,26; 95% CI: 1,09-4,68), histórico de dor de dente (PR=4,45; 95% CI: 2,00-9,91) e fraco senso de coerência dos pais (PR=2,27; 95% CI: 1,03-5,01). Com base nos resultados, pode-se concluir que variáveis clínicas, como a dor de dente, sociodemográfica e senso de coerência dos pais podem interferir na autoconfiança devido a alterações de saúde bucal em pré-escolares.

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