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ORIGINAL ARTICLE

Knowledge about oral health habits in students of the Huachi Grande educational unit

Conocimientos sobre hábitos de salud oral en estudiantes de la unidad educativa Huachi Grande

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ABSTRACT

Introduction: children's oral health is an important objective in the context of public health policy.
Objective: to analyze knowledge of oral health habits and oral hygiene levels in students aged six and seven years.
Methods: cross-sectional, observational and descriptive study. The universe consisted of 30 students aged six and seven years, respectively, of the Huachi Grande educational unit, second year of basic parallel A, in the 2022-2023 academic year. The sample coincided with the universe and was obtained by non-probabilistic convenience sampling. Descriptive and inferential statistics were used. The results were presented in tables and graphs to facilitate analysis and discussion.
Results: children aged seven years predominated (60,4 %), 33,7 % of them were male and 26,7 % were female. 86 % of the children used the toilet. Eighty-six percent of the children used a toothbrush; however, 13 % of the children did not use a toothbrush, which is not a figure to be underestimated considering the number of the sample studied. Forty percent brushed three times a day, 30 % brushed twice a day and 13,3 % did not brush their teeth at some time during the day.
Conclusions: applying this type of tool allows us to determine the hygienic habits of schoolchildren and to be able to subsequently work on the causes from the point of view of health promotion and even find the influence of the socioeconomic conditions of each family on these habits.

Keywords: Education; Oral Health; Oral Hygiene; Toothbrushing.

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RESUMEN

Introducción: la salud bucal de los niños es un objetivo importante en el contexto de la política de saludpública.
Objetivo: analizar los conocimientos sobre hábitos de salud oral y los niveles de higiene bucodental en estudiantes de seis y siete años de edad.
Métodos: estudio transversal, observacional y descriptivo. El universo estaba constituido por 30 estudiantes de seis y siete años respectivamente, la unidad educativa Huachi Grande, segundo de básico paralelo A, en el curso académico 2022-2023. La muestra coincidió con el universo, se obtuvo mediante muestreo no probabilístico por conveniencia. Se utilizó estadística descriptiva e inferencial. Los resultados fueron presentados en tablas y gráficos para facilitar el análisis y la discusión.
Resultados: predominaron los niños de siete años (60,4 %), de ellos el 33,7 % corresponden al sexo masculino y el 26,7 % al sexo femenino. El 86 % de los niños utilizan el cepillo dental, sin embargo, contabilizar un 13 % que no es una cifra a despreciar tomando en cuenta incluso la cantidad de la muestra estudiada. El 40 % se cepillaban tres veces al día, el 30 % se cepillaba dos veces al día resultando que el 13,3 % no se cepillaba los dientes en algún momento del día.
Conclusiones: aplicar este tipo de herramientas permite determinar los hábitos higiénicos de los escolares y poder trabajar posteriormente en las causas desde la promoción de salud e incluso encontrar la influencia de en las condiciones socioeconómicas de cada familia en estos hábitos.

Palabras clave: Educación; Salud Bucal; Higiene Bucal; Cepillado Dental.

INTRODUCTION

The factors that can most affect the oral health of people is the lack of knowledge about proper oral hygiene; about 3500 million people according to WHO are estimated to have oral diseases that are the product of several risk factors that can be changeable such as sugar intake, alcohol and tobacco consumption, as well as poor hygiene.[1]

Oral diseases, although mostly preventable, are a major burden on the health sector in many countries and affect people throughout their lives, causing pain, discomfort, deformity and even death. According to The Global Burden of Disease Study 2019 (The Global Burden of Disease Study 2019), untreated dental caries in permanent teeth is the most prevalent health disorder.[1]

According to data from the Pan American Health Organization (PAHO), nine out of ten people are at risk of contracting an oral disease ranging from mild caries to more serious diseases such as gum disease, including gingivitis or periodontitis, which can lead to mouth cancer in the worst cases. In spite of the development of the countries and the measures they have taken for prevention, there is a large percentage of school-age children who contract caries.[2]

A 1996 report in Ecuador shows the prevalence of dental caries in schoolchildren aged six to 15 years at 88,2 %, by 2009 the prevalence of dental caries in schoolchildren examined in the same age range decreased to 75,6 %. More recent studies in unrepresentative samples have reported a prevalence of 70 % of caries in children aged eight to 10 years.[3]

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aking into account that oral health is a priority for the psychological and emotional well-being of people, previous studies were taken into account where the promotion of oral health in children of the Rosa Zarate Educational Unit, province of Tungurahua, Ecuador, was evidenced. The results of the research applied to school students, it was noted that 56 % of them went to the consultation for reasons of ailment seeking curative care, while only 44 % attended for prevention in oral health.[4]

The findings obtained in the study highlight the priority, of high relevance to implement the educational program for the promotion of oral health, in the city of Ambato, network that makes up the primary health level, have an attention of 47 %, while at the private level reaches 20 %.[4]

The objective of this review was to determine the knowledge that school students have about oral health habits, of the Huachi Grande Educational Unit, Second Year of Basic Parallel A, in the school year 2022-2022.

METHODS

A cross-sectional, observational and descriptive study was conducted. The universe was constituted by 30 students of six and seven years old respectively, the educational unit Huachi Grande, second of basic parallel A, in the academic year 2022-2023. The sample matched the universe, was obtained by non-probabilistic sampling by convenience and according to exclusion and inclusion criteria.

Inclusion criteria:
- Parents or guardians who expressed written consent for schoolchildren to participate in the study.
- Patients aged six and seven years.
- Who are psychically and mentally fit.

Exclusion criteria:
- Those who do not meet the above criteria.

The variables used to obtain information by means of a survey for this purpose were: sex, age, use of toothbrush and dental floss, frequency of brushing and whether they regularly visit the dentist.

Processing and analysis of the information:
After obtaining the primary data from each of the patients, the results of each of the variables were counted, using a database prepared in the Microsoft Excel system, in which the corresponding operations of addition were carried out for the preparation of the tables, which were subjected to statistical analysis through the percentage method.

Different methods were used to develop the research:
Theoretical methods: analysis and synthesis, hypothetical deductive, systemic approach.
At the empirical level: experience registry, documentary analysis and surveys.
At the statistical level: descriptive statistics were used.

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Bioethical Considerations
A document was prepared and presented to each parent or guardian of the children included in the research, complying with fundamental ethical principles such as: respect for persons or autonomy, beneficence and non-maleficence, and the principle of justice. She was informed in this document that her participation is completely voluntary and that she can leave the activities when she deems it pertinent without affecting the doctor-patient relationship and without the need to give explanations.

The research was approved by the scientific council of the institution and complied with the principles of medical ethics and the aspects established in the Declaration of Helsinki.

RESULTS

Of the sample studied, it was possible to work with a higher percentage of seven-year-old children, 60,4 % of whom 33,7 % were male and 26,7 % were female (Table 1).

Table 1. Characteristics of the analyzed studies.

Age	Sex				Total	
	Female		Male			
	No	%	No	%	No	%
6	5	16,6	7	23	12	39,6
7	8	26,7	10	33,7	18	60,4
Total	13	43,3	17	56,7	30	100

The sample showed that 86 % of the children use a toothbrush, but 13 % of the children do not use a toothbrush, which is not a figure to be underestimated, even taking into account the size of the sample studied (Table 2).

Table 2. Distribution of the sample according to toothbrush use.

Use of toothbrush	Frequency	%
Yes	26	86,6
No	4	13,3
TOTAL	30	100

Twelve children were counted for 40 % who brushed three times a day, 30 % brushed twice a day and 13,3 % did not brush their teeth at some time during the day (Table 3).

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Table 3. Distribution of the sample according to the frequency of daily tooth brushing.

Daily tooth brushing	Frequency	%
Four times	0	0
Three times	12	40
Twice	9	30
Once	5	16,6
Nunca	4	13,3
Total	30	100

It should be noted in the following data that the use of dental floss was only found in 20 of the total number of children who used a toothbrush. Of the total sample, 66,6 % used dental floss and 10 children did not use it (Table 4).

Table 4. Distribution of the sample by use of dental floss.

Use of dental floss	Frequency	%
Yes	20	66,6
No	10	33,4
TOTAL	30	100

A greater number of children reported attending the dentist's office every six months 33,4 %, and it was also observed that both those who visit the dentist once a year and those who never do so coincide for 20 % of the sample studied (Table 5).

Table 5. Distribution of the sample according to the frequency of attendance at a dental consultation in one year.

Attendance at dental consultation	Frequency	%
3 months	8	26,6
6 months	10	33,4
12 months	6	20
Never	6	20
Total	30	100

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DISCUSSION

Dental caries is the most common chronic childhood disease, but it is preventable and curable. According to the last National Oral Health Survey of 2015, the prevalence of caries in children aged five - six years in primary dentition is 25 % and in permanent dentition 1,8 %; in children aged 12 years it is 14,6 % and in children aged 15 years it is 18,6 %.[5]

Alvarez Salcerio P et al.,[6] carried out in the "Celia Sanchez" elementary school in the municipality of Santa Clara, periodic revisions of the oral cavity of preschoolers, which showed an increase in the ceo-d figures, which translates into an increase in dental caries. The presence of incorrect hygienic habits was also detected, which coincides with the present study.

Nicot Navarro et al.,[7] affirm that oral health promotion interventions in preschoolers are effective in the acquisition of information on oral health, which coincides with the findings of the present study. Likewise, Pardo Navarro M.,[8] states that health education projects in schools for preschool children are very effective.

The results of the present investigation coincide with those of a large percentage of the investigations consulted regarding the presence of low levels of oral habits in children in communities far from the main cities and the directly proportional relationship with the low social, economic and educational level, both in terms of the presence of low levels of oral habits in children in communities far from the main cities and the directly proportional relationship with the low social, economic and educational level, both in terms of the presence of low levels of oral habits in children in communities far from the main cities and the directly proportional relationship with the low social, economic and educational level. These may be related to socioeconomic status, race or ethnicity, age, sex, or general health status.[9,10]

Although common dental diseases are preventable, not all members of the community are aware of or able to benefit from appropriate oral health promotion measures, as reflected in the Ottawa Charter. Reducing disparities requires broad, wide-ranging approaches that target populations most at risk for specific oral diseases and involves improving access to existing services.[11]

It is agreed that starting toothbrushing as soon as deciduous teeth erupt ensures that: oral hygiene is in place and building positive hygiene habits in children for later life by ensuring that they consistently practice oral hygiene, which will be critical to maintaining it.[12]

CONCLUSIONS

Oral health prevention in children is important for human well-being, as it is part of overall health, so children should be educated from an early age to benefit from good oral health in the long term. In this study we can observe the predominant role of all the people who are in charge of the children, teachers, parents, grandparents, aunts and uncles among others, who watch over and promote good oral health practices from a very young age, it is important to instruct the child from a very young age with habits that they will not forget until they are older people.

Conflicts of interest

The authors declare that there is no conflict of interest.

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Authors' contribution
All authors participated in the conceptualization, formal analysis, project management, data curation, writing - original draft, writing - revision, editing and approval of the final manuscript.

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