

ORAL HEALTH IN HOSPITALISED PEDIATRIC PATIENTS: INVESTIGATION STUDY



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INTRODUCTION

A large number of hospitalised children present symptoms of poor hygiene in their oral cavity due to the side effects of their disease/treatment. This is further aggravated by a lack of oral care at this stage.^{1,2}

Inadequate knowledge of preventive methods constitutes a barrier to oral health and may affect the general health and well-being of individuals.³

OBJETIVE

To characterize the knowledge of the parents/caregivers about the oral health care to be adopted in children with regular medical care and during the period of hospitalization at the Hospital Dr. Nélio Mendonça, Funchal.

MATERIALS AND METHODS

Type of study: Cross-sectional observational study.

Measurement instruments: Two structured questionnaires properly designed based on a bibliographical research, one directed for caregivers of children with regular medical care and another one directed for caregivers of hospitalised children.

Data collection: Pediatric Unit of Dr. Nélio Mendonça Hospital, between June and August 2017.

Complementary information: Action of formation and promotion for the oral health and delivery of an informative pamphlet to promote the oral health knowledge of those responsible for children with systemic pathology.

Inclusion criteria in the selection of participants: Caregivers accompanying children from 6 to 18 years of age at routine consultations; caregivers of children hospitalised between 6 and 18 and those caregivers aged 18 or over.

Criteria for exclusion in the selection of participants: Caregivers with some comprehension deficit and caregivers who did not sign the informed consent form for participation in this study.

Data analysis: Statistical Package for the Social Sciences - SPSS® v.24.0, with a significance level of 0.05.

RESULTS

Sample: 72 caregivers (36 children attending a hospital appointment and 36 children of hospitalization)

Children with regular medical care presented more changes in their oral cavity (38.9%) than in the hospitalization (11.1%), $p=0.018$

Lower brushing frequency in hospitalization compared to brushing at the child's home, $p=0.003$

Scarcity in the use of complementary oral hygiene instruments

When the disease was diagnosed, the parents of the children were not informed of the care they should take in oral hygiene

Most children either from the day hospital or hospitalised were brushing their teeth without parental supervision

The parents of the children were unaware of the recommended amount of fluoride (72.2% in regular hospital appointment and 75% in the hospitalization)

The economic limitation was reported by those responsible as being the main barrier for dental consultations by their children

Table 1. Comparison of the children's brushing frequency in hospitalization with the children's brushing frequency at home

	What is the frequency of tooth brushing during hospitalization?												p
	Total			1 time/day			2 times/day			≥ 3 times/day			
What is the frequency of tooth brushing at home?	n	%L	%C	n	%L	%C	n	%L	%C	n	%L	%C	
1 time/day	13	100%	20.6%	8	61.5%	24.2%	4	30.8%	16.7%	1	7.7%	16.7%	0.003*
2 times/day	38	100%	60.3%	20	52.6%	60.6%	15	39.5%	62.5%	3	7.9%	50.0%	
≥ 3 times/day	12	100%	19.0%	5	41.7%	15.2%	5	41.7%	20.8%	2	16.7%	33.3%	
Total	63	100%	100%	33	52.4%	100%	24	38.1%	100%	6	9.5%	100%	

*McNemar test, with a significance level of 0,05.

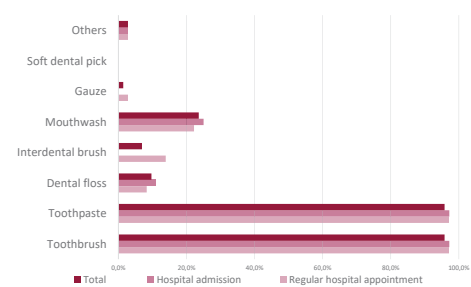


Figure 1. Frequency of oral hygiene instruments by children.

DISCUSSION

Main results obtained	Agreement of other authors	Disagreement of other authors
The caregivers did not receive guidance for the oral hygiene of the children (66.7% in children with regular medical cares and 58.3% in hospitalization)	<ul style="list-style-type: none"> Ximenes <i>et al.</i> (92% in the hospitalization)⁴ Lima <i>et al.</i> (98.75% in the hospitalization)⁵ 	<ul style="list-style-type: none"> Ballestreri <i>et al.</i> (52% of caregivers received guidance)⁶
Most children had no supervision of their oral hygiene (61.1% in children with regular medical cares and 41.7% in the hospitalization)	<ul style="list-style-type: none"> Ximenes <i>et al.</i> (50% in the hospitalization)⁴ 	
The frequency of dental brushing during hospitalization decreased substantially compared to brushing at home (only 9.5% of children brushing ≥ 3 times/day in the hospitalization), $p=0.003$	<ul style="list-style-type: none"> Blevins, J. (17% brushing in the hospital vs 61% brushing at home)⁷ Lima <i>et al.</i> (only 8.75% of children brushing ≥ 3 times/day at hospitalization)⁵ 	<ul style="list-style-type: none"> Ximenes <i>et al.</i> (37.5% of children brushing ≥ 3 times/day in hospitalization)⁴
The main oral hygiene instruments used were a toothbrush and toothpaste (95.8% in children with regular medical cares and hospitalization) The parents, in general, are not aware of the existence of complementary instruments of oral hygiene (only 8.3% of children with regular medical cares and 11.1% hospitalized children used dental floss)	<ul style="list-style-type: none"> Melo <i>et al.</i> (97.7% toothbrush and toothpaste)⁸ Ximenes <i>et al.</i> (90.6% toothbrush and toothpaste)⁴ Lima <i>et al.</i> (73.7% toothbrush and toothpaste)⁵ 	<ul style="list-style-type: none"> Ballestreri <i>et al.</i> (36.7% of the children used dental floss as a complement to dental brushing)⁶
All caregivers consider that it is important to include the Dentist in the hospital team (100%)	<ul style="list-style-type: none"> Ballestreri <i>et al.</i> (98.3%)⁶ 	

CONCLUSION

The oral health of systemically compromised pediatric patients is often neglected in favor of the general symptomatology that the child presents. It is noted that in this context, both health professionals and those caregivers for children are not adequately aware of the importance of promoting oral health in this specific group of children.

CLINICAL IMPLICATIONS

The performance of oral health education/promotion actions in a hospital environment represents a differentiating factor for the optimization of the health and quality of life of the systemically compromised pediatric population.

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