

Educative practices and attitudes within the pre-school environment: evaluating the education professionals

Leonardo dos Santos Antunes^(a)
Lívia Azeredo Alves Antunes^(b)
Marcos Paulo Fonseca Corvino^(c)

^(a)MSc in Restorative Dentistry; ^(a)Adjunct professor, Discipline of Preventive Dentistry – School of Dentistry of Niterói, Fluminense Federal University, Rio de Janeiro, RJ, Brazil.

^(b)MSc in Pediatric Dentistry, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil.

Abstract: School and family together play an important role in the individual development of children. Therefore, this study aimed at evaluating the practices and attitudes towards oral health care of 245 education professionals working in 24 public municipal pre-schools in Niterói, State of Rio de Janeiro, Brazil. The data were obtained from self-questionnaires consisting of both open and closed questions. The methodology was both quantitative and qualitative, and the quantitative analysis was based on frequency (%). Regarding oral health practices, it was observed that the majority of the education professionals emphasized toothbrushing as a vital method of oral hygiene. In addition, 70.7% of the education professionals performed other types of oral hygiene activities with the schoolchildren, and 17.1% did so with the children's families. All the participants of the study considered that education professionals have a key role in promoting healthy oral habits amongst the schoolchildren and they believe that involving the dentist in educative programs is important. It was therefore concluded that the education professionals surveyed have positive practices and attitudes regarding the children's care, and they recognize their role in fostering healthy habits and developing integrated pedagogic oral health programs.

Descriptors: Dental health education; School health services; Oral health; Health promotion.

Corresponding author:

Leonardo dos Santos Antunes
Av. Rui Barbosa, 29/307
São Francisco
Niterói - RJ - Brazil
CEP: 24360-440
E-mail: lsantunes@terra.com.br

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Introduction

Education is defined by Pilon¹ (1986) as a manner of promoting man's development not only as an individual, but also as "part of a complex environment which includes biological, psychological, social, economic, and physical aspects forming the existence link". The author also points out the importance of an interchange between teacher and student for achieving a successful educative process since both play important roles in the process of educating the individual.

Health, in turn, can be seen as a perfect and continuous adaptation of an organism to its environment. Therefore, oral health can be understood as a balance between teeth and oral environment components accompanied by general well-being.²

Hence, education and health aim to stimulate citizens to learn about their citizenship as well as other ethical values, thus facilitating his or her comprehension about their role, by encouraging them to think critically about their quality of life so that they can demand the improvements of health services and otherwise find the means for improving their health.^{3,4}

Within this context involving education and health, both school and family play a key role in the children's individual development since they spend most of their time in educational institutions, which consequently become an important environment for developing healthy habits.⁵

Therefore, practices promoting awareness about health and valuing it should be developed early during the pre-school years, that is, when the children are able to absorb information enough to incorporate oral health care into their daily life habits.⁶

Caries disease and periodontal problems can affect the children's development and their involvement in important life activities. Presence of pain, infection or dysfunction of the stomatognathic system can limit the necessary ingestion of energetic foods, thus affecting the children's growth as well as their learning, communication skills and recreational activities.⁷

In most cases the education professional's role becomes important in restoring and keeping oral health amongst children since access to oral health care is often difficult for their needy families.⁸ Also,

the disorders manifesting through signs and behaviors which can interfere with the child's learning process can be observed.⁹

According to Fabre *et al.*⁶ (1998), however, in some cases teachers and other school personnel do not assume their responsibility in developing general health amongst people, and believe that oral health should be exclusively addressed by dentists.

In view of this situation, the present study had the purpose of evaluating the practices and attitudes of public pre-school professionals towards school-children's oral health.

Material and Methods

The study population was obtained from a demographic census including all education professionals (teachers and education agents) working in the municipal public pre-schools of Niterói, State of Rio de Janeiro, in 2006. Niterói was chosen for study because of geographic and logistic reasons.

After visiting the schools, it was decided that the study should involve not only the teachers, but also the education agents as they have constant and daily contact with the children in the class room.

The number of schools (n = 24) was found to be in accordance with the data provided by the Niterói Education Office, and the number of questionnaires (n = 245) was in accordance with the number of education professionals working in class rooms according to each school administration.

This study was submitted to and approved by the local ethics committee (050/06) and all the participants signed an informed consent form permitting that data be collected and used for study.

The analysis instrument was based on a semi-structured self-questionnaire consisting of open and closed questions. Inclusion of open questions allowed education professionals to express themselves in a sincere way, thus both preserving multiple information and preventing limited questions.

The questionnaires were delivered and returned by the coordinators of each school. Data regarding objective questions were assessed by descriptive analysis, while a content analysis was applied to the subjective questions. Questions were categorized in terms of answer frequency, which allowed assess-

ment of the subject's comprehension of the theme of study. This procedure consisted of two steps: to select key expressions regarding each speech, revealing the main discursive content for identification of the main idea from each key expression, that is, what the subjects actually had to say; to gather key expressions regarding central ideas suggested by the education professionals.^{10,11}

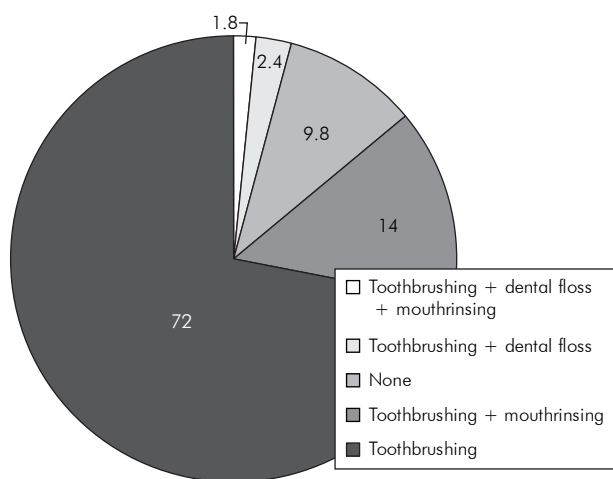
According to several authors,^{10,11} the use of different methodological instruments increases the analysis potentiality, hence quantitative and qualitative methodologies are crucial for complementing the results obtained.

The questionnaire used in the present study consisted of questions about gender; age; hygienic habits practiced with schoolchildren; use of oral health themes in class room with both children and their families; observation of the child's teeth; teacher's role in promoting healthy habits amongst schoolchildren; and teacher's interest in developing a program integrating oral health education in the academic curriculum (dentist-teacher relationship).

Results

The return rate was 66.93%, thus totaling 164 questionnaires. It was observed that of the 164 participants of the present study, 162 (98.8%) were woman, with a mean age of 36.5 ± 9.3 years.

Regarding hygienic practices, it was observed



Graph 1 - Hygienic methods (%) adopted by education professionals with the school children from public pre-schools of Niterói, State of Rio de Janeiro (2006).

that the majority of the education professionals (90.2%) regarded toothbrushing as a vital hygienic method, whereas only 2.4% considered the use of dental floss to be essential (Graph 1).

Amongst the oral health activities usually practiced with the schoolchildren (Table 1), it was observed that 70.7% of the educational professionals employed at least one type of activity, and 59.5% made use of "games", "music", and "reading".

Table 2, on the other hand, shows that very few education professionals develop these activities involving the schoolchildren's families.

Table 1 - Oral health activities performed by education professionals with the school children from public pre-schools of Niterói, State of Rio de Janeiro (2006).

| Question / answer | n | % |
|---|--|---------|
| Is there some type of activity with the schoolchildren? | | |
| Yes | 116 | 70.7 |
| How? | Games, tricks, reading, music, lectures. | 69 59.5 |
| | Guidance about hygiene | 28 24.1 |
| | Creation of habits through toothbrushing | 26 22.4 |
| | Guidance about diet | 14 12.1 |
| | Guidance about oral health | 5 4.3 |
| | No answer | 8 6.9 |
| No | 40 | 24.4 |
| No answer | 8 | 4.9 |
| Total | 164 | 100 |

Table 2 - Oral health activities performed by education professionals with the school children's families from public pre-schools of Niterói, State of Rio de Janeiro (2006).

| Question / answer | n | % |
|--|--|---------|
| Is there some type of activity with the schoolchildren's families? | | |
| Yes | 28 | 17.1 |
| How? | Talks | 13 46.4 |
| | Daily guidance | 9 32.1 |
| | During the meetings with the schoolchildren's families | 8 28.6 |
| | No answer | 1 3.6 |
| No | 129 | 78.6 |
| No answer | 7 | 4.3 |
| Total | 164 | 100 |

These professionals also demonstrated positive attitudes towards the children's oral health care, since 83.5% of them have been observing the teeth of their pupils "occasionally", as stated in some questionnaires.

In addition, it is worth emphasizing that all the 164 education professionals considered they played an important role in promoting healthy habits amongst their schoolchildren. This observation can be corroborated by the following statements:

"Yes, teachers are habit and opinion formers".

"Sure. The children usually mirror the teacher. If he or she proposes something, then they got to do it too".

"It's surely one of the key aspects in the guidance and awareness about oral hygiene".

"...we spend a long time with the children and we're also responsible for developing their habits".

"I'm sure. Particularly the pre-school children, to whom pre-school is their home extension and the teacher is their second mother".

The education professionals also believe that establishing an interchange with dentists is important because such practitioners are recognized as ideal partners for developing health education programs as well as the following integrated activities: pedagogic projects, debates, group discussions, lectures, workshops, elaboration of educational materials, and conferences. This can be observed in the following statements:

"We would have more information on how to proceed, thus helping us to better guide the children".

"It's important to know how to better address this issue with children and their families".

"These practitioners could offer teachers and families correct information through lectures, debates, and group discussions".

"Such an integration would allow teachers, students, and other school personnel to be better informed, thus providing a better oral health for all".

Discussion

The present study aimed at evaluating practices and attitudes of education professionals working

in public pre-schools because such institutions are thought to be suitable for developing health education programs.¹²⁻¹⁴ Also, pre-school children are more likely to learn information on oral health care and incorporate it into their daily habits.⁶

The questionnaire return rate (66.93%) was found to be satisfactory in comparison to that of other similar studies carried out in several countries.¹⁴⁻²⁰

Regarding the oral hygiene procedures employed in the public pre-schools of Niterói, the results were similar to those found by Brandão *et al.*²¹ (2004), who surveyed coordinators working in public pre-schools in Araçatuba, State of São Paulo, Brazil. They observed that 87.9% of the schoolchildren brushed their teeth at least once a day. However, the findings regarding the use of mouthrinses with fluoride solutions were found to differ from those by Brandão *et al.*²¹ (2004), who observed that a great number of schools performed this oral health practice with 3-6-year-old children. Although in the present study a few education professionals stated that they had implemented the mouthrinse as an oral health practice besides toothbrushing, it is also worth emphasizing that this practice should be limited to those children presenting high risk of caries disease because pre-school children are more likely to ingest fluoride gels or mouthrinses.²²

According to Petersen *et al.*²³ (1990), Petersen, Esheng¹⁸ (1998), and Brandão *et al.*²¹ (2004), the majority of teachers have practiced some type of oral health activity within the class room. Nevertheless, these findings differ from those of Petersen *et al.*¹⁷ (1995) and Vasconcelos *et al.*¹⁴ (2001), who showed that only 36.8% and 10% of the teachers, respectively, had done so in the class room. It is worth noting that although these studies have evaluated teachers at different levels and in different places, oral health activities should be performed with all children, regardless of their age.

Regarding oral health activities involving the children's families, however, few teachers and education agents have reported this practice – a finding also observed in the study by Brandão *et al.*²¹ (2004).

Therefore, educational activities regularly elaborated for teachers, parents, and children are

found to be necessary, and other professionals such as dentists and pedagogues, including the teachers, should be involved in doing so according to each group and age.²¹

Integration of oral health activities in the academic curriculum would also allow addressing this issue in the class room,¹⁴ serving as a link between them and the community.¹⁵

The majority of education professionals have shown positive attitudes towards preventive oral health care, responding positively to their own involvement in health education programs aimed at promoting healthy oral habits amongst schoolchildren as well as in other studies.^{17-20,23}

The results presented by this study suggest that education professionals are interested in undertak-

ing oral health education in their schools, and the teachers should be better qualified in this subject so that they can feel encouraged to help promote healthy habits amongst pre-school children.²⁴

Conclusion

The following conclusions can be drawn by analyzing the results obtained in this study:

- The oral health care activities performed by education professionals are found to be limited.
- Education professionals taking part in this study demonstrated positive attitudes regarding the children's oral health care, they recognize their role in promoting healthy habits and are interested in undertaking integrated oral health education.

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