

PARTICIPATION OF PRESCHOOL TEACHERS IN STRENGTHENING CHILDREN'S ORAL HEALTH

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Abstract. A proper approach to a healthy lifestyle and personal hygiene habits bought in the early years of a child's life has greater lasting value. Preschool teachers' knowledge of children's oral health and care is important to reduce the number of oral health problems now and in the future. It is therefore important to develop good oral hygiene habits in children from an early age. Children of preschool age spend a lot of time in kindergartens, so it is important that not only parents set a good example for their children, but also educators contribute to this. This study aims to evaluate the participation of preschool teachers in strengthening children's oral health and imparting knowledge about individual oral hygiene and prevention of oral diseases. A quantitative research method is applied - a questionnaire survey. The results show that a considerable proportion of pre-school teachers organize oral health activities for children, but children do not brush their teeth in kindergarten. In addition, professionals working with children show that they have sufficient knowledge about oral health but express a need to acquire new knowledge. Conclusions: Children in pre-school educational institutions are motivated to take care of their oral health, it is discussed at least once a year in most institutions, and teachers are interested in this topic and are looking for new knowledge.

Keywords: preschool teachers, educators, oral health, health improvement activities

INTRODUCTION

One of the essential conditions for a harmonious society and personality development is the health of children. In order to have healthier children and their well-being in the future, healthy lifestyle habits must be formed. A healthy lifestyle must be ensured from the moment a child is born, and the main role belongs to the child's family, but the preschool teachers working in children's educational institutions also play an important role. Children spend a third of their time in schools, so for some children, educators or health professionals are the closest persons with whom they can talk about matters of concern, including those related to health (Avelytė, Jociūtė & Astrauskienė, 2021).

Numerous studies can be found in modern literature that analyse the factors that determine the health of preschool children, including oral health (Dinea & Domnariu, 2018; Almutairi, Scambler & Bernabe 2021; Kurnaz & Bayraktar 2021). Personal health care services are well developed and accessible to all residents of the country, but the incidence of dental diseases remains high, and the number of children who need dental prosthetics services is increasing (DANTŲ PROTEZAVIMO PASLAUGOS (Irv.lt)). Preserving healthy teeth for as long as possible is one of the most important goals of health care. Tooth decay is a preventable disease, but it still very often affects preschool children. And this is a public health problem, which is determined by the social and economic situation, eating habits, the attention and attitude of the children's parents to the child's oral hygiene, the parents' ability to visit institutions with the child for oral health care services (Razmienė, 2013). Untreated dental diseases in a child can cause toothache, difficulty in communicating, sleeping, eating. For these reasons, the quality of the child's life deteriorates, it affects them psychologically and socially, children feel discomfort. The knowledge of parents and educators about children's oral hygiene is a very important factor in helping the child to choose a healthy lifestyle (Martinėlytė, Vasiliauskienė & Petrauskienė, 2021). Preschool children spend a lot of time in children's educational institutions, so it is important to analyse how preschool teachers participate in strengthening children's oral health.

The aim of the study is to analyse the participation of preschool teachers in strengthening children's oral health.

Study tasks:

1. To evaluate how educators initiate children's behaviour related to the strengthening of oral health.
2. To disclose oral health strengthening activities that are carried out in pre-school education institutions.
3. To identify the need of information about children's oral health.

RESEARCH MATERIALS AND METHODS

Three methods were chosen to identify the participation of pre-school educators in strengthening children's oral health: a systematic analysis of the scientific literature, a quantitative study – a questionnaire survey and descriptive and graphic analysis of the results of the study. The search for sources of information published in English was carried out in EBSCO, „PubMed“ and other databases. In March–April 2023, a quantitative survey was conducted – a questionnaire survey. Taking into account the principles of scientific research and ethical norms, an original anonymous questionnaire was prepared. The questionnaire was validated by requesting 2 participants and adjusted according to the

comments made. These replies were not included in the follow-up investigation. The questions were designed to help clarify the demographic data of each respondent in the study, the changes in children's mouths and teeth observed by educators, the involvement of children in oral health promotion activities and the cleaning of teeth in an educational institution, and the need for information about children's oral health.

After obtaining the consents of the heads of kindergartens and in accordance with the principles of bioethics, an anonymous survey of two Pasvalys kindergarten teachers and members of the Facebook groups „AUKLĖTOJA AUKLĖTOJAI (ideas, works, lesson plans)“ and „LEADERS OF PRE-SCHOOL AND PRIMARY EDUCATION TEACHERS“ was held. The questionnaire was published on the website www.manoapklausa.lt.

The sample of the study is the target group – pre-school educators. The respondents were between the ages of 21 and 64. 86 questionnaires were correctly filled out, and their results are analysed in this publication. The obtained data were processed using „Microsoft Office Excel“ and „Microsoft Word“ programs.

THE RESULTS

Analysis of demographic data revealed that the majority of participants were 30-45 years old (48,8%). The largest number of respondents were from the towns of Panevėžys county (73,3%). (See Table 1).

Table 1

Demographic Data of the Respondents		
Age of Respondents		
21–30 years	30–45 years	46–64 years
n=16 (18,6 %)	n=42 (48,8%)	n=28 (32,6%)
Towns Where Respondents Live		
Panevėžys county	Other	
n=64 (73,3%)	n=22 (26,7%)	

The majority (37,2%) of respondents who took part in the study are from the town of Pasvalys, slightly less (36,1%) are from the town of Panevėžys. A quarter of respondents (26,7%) marked the answer “Other”, they are from other cities such as Vilnius, Kaunas, Jonava, Ukmergė, Šiauliai, Joniškis, Kėdainiai, Trakai.

It is important that children, while spending time in an educational institution, are accustomed to observe personal hygiene skills. Respondents were asked if children in an educational institution brush their teeth. The analyzed answers show that less than a third (30,2%) of children brush their teeth in kindergarten. The majority of children (57%) do not brush their teeth in an educational institution, and 12,8% do this sometimes. The results show that the possibilities of personal oral hygiene in a children's educational institution could be more widely promoted, since children spend a lot of time in them.

The following question aims to find out whether children have their own toothbrushes in an educational institution. Unfortunately, only a quarter of the children (24,4%) have their own toothbrush in the institution, and the majority (75,6%) do not have their own toothbrush. After reviewing these data, it can be said that most often children do not brush their teeth in an educational institution and do not have a toothbrush.

As shown by a study conducted by Natapov, Dekel, Pikoovsky & Zusman (2021), supervising the brushing of children's teeth achieves very good results in the prevention of tooth decay, especially when toothpaste with fluoride is used for cleaning. In order to reduce the prevalence of dental diseases, it would be appropriate to implement this preventive measure in children's educational institutions in Lithuania.

In order to maintain good oral health, it is important to detect changes in the mouth early, so that they can be eliminated as early as possible and more serious oral diseases could be avoided. Educators spend a lot of time interacting with children, so it is likely that they can notice changes in children's oral health and report them to their parents or guardians. Respondents were given a list of oral changes and asked to indicate which of them they notice (See Table 2).

Table 2

Signs of Oral Health in Children Observed by Educators	
Signs of Oral Health	Respondents observing the signs
Tooth discoloration	66,3%
Healthy teeth	64,0%
Tooth decay	57,0%
Soft plaque	47,7%
Changed mucosa or gums	17,4%
I don't notice anything	17,4%

A summary of the results shows that the most frequently observed changes in the color of the teeth (66,3%) and healthy teeth (64%). As for the most common oral disease among children, tooth decay, it is noticed by more than half (57%) of the respondents. The survey data show that there are also such respondents who do not notice anything in the children's mouth (17,4%). The summarized results show that most educators pay attention to the signs of oral health in children.

Children spend a significant part of the day in an educational institution. For this reason, they can tell their complaints not to parents, but to educators, so it is important that the latter hear complaints. The survey included a question about how often educators hear from children that they have a toothache (see Figure 1).

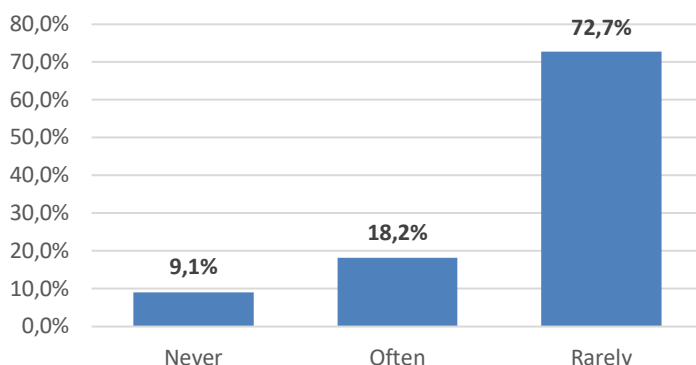


Figure 1. **The frequency of complaints about toothache expressed to educators**

From the data collected, it can be seen that the largest part (72,7%) replied that they rarely hear that a child has a toothache, a relatively small percentage (18,2%) replied that they hear a complaint often, and a very small part replied that they never heard. It can be said that children complain to teachers as well, not only to parents about oral health.

From the results obtained, it can be seen that children tell their complaints to educators, so it is also important whether they report complaints to parents or guardians. The data show that the majority of educators (72,1%) tell parents about children's oral health complaints, but about a quarter of educators (27,9%) do not report it. Summarizing the results, it can be said that the majority of educators behave correctly in informing parents about children's complaints, as this can help reduce the consequences of oral diseases.

It is important that educators encourage children to protect their oral health. Therefore, it was asked whether educators in educational institutions talk to preschool children about the importance of oral health (see Figure 2).

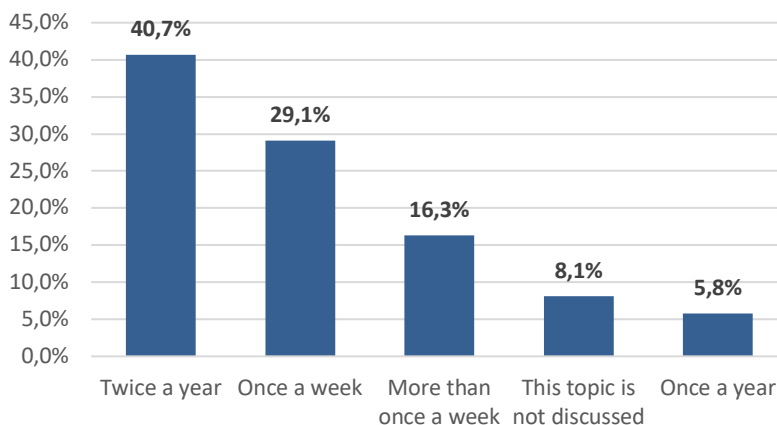


Figure 2. **Frequency of conversations about the importance of oral health**

Almost all respondents (97,7%) answered that they talk to children about the importance of oral health. 40.7% do it twice a year, one third of the respondents do it once a week (29,1%) or more often (16,3%). In summary, it could be said that the topic of oral health is discussed with different frequency in educational institutions.

For the development of children's abilities and skills, active activities are important. The questionnaire asked to share the ways in which educators encourage preschool children to take care of their teeth (see Figure 3).

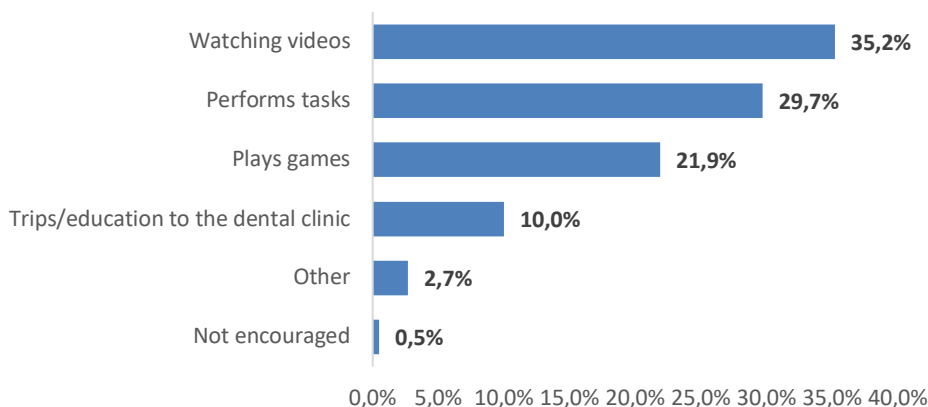


Figure 3. Ways to activate children for dental care

Just over a third (35,2%) of respondents said they encourage children to watch movies on oral health, a similar number (29,7%) said they perform various tasks that are not only interesting for children, but also useful. Others noted that they play various games, go to dental clinics for education, and sing songs. It can be said that educators involve children in oral health promotion activities in an interesting and different way and remind them of the importance of dental care.

In order to find out the need for new knowledge for educators about oral care of children and prevention of dental diseases, the respondents were asked if they have enough knowledge about oral health. An analysis of the responses shows that the majority of educators (75,6%) believe that they have sufficient knowledge about oral health. A very small part of the respondents (5,8%) say that they have a lot of knowledge on this topic, and almost a fifth (18,6%) – that they do not have any knowledge of the topic of oral health at all. In addition, the majority of respondents (81,4%) expressed the need to acquire new knowledge.

It is important that preschool teachers working in an educational institution know about oral health and care, because they determine the behaviour of children. It is important to teach children something new and interesting (Fernando, Kanthi & Johnson, 2013). Therefore, teachers constantly seek knowledge not only in training, but also independently (see Figure 4).

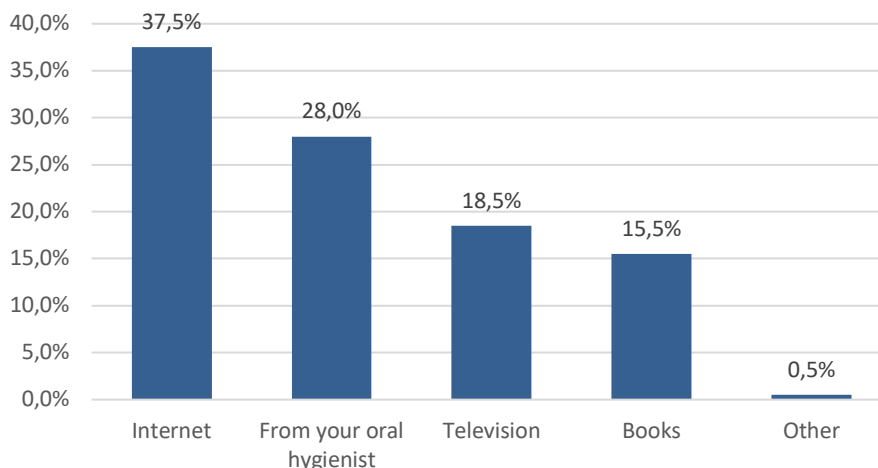


Figure 4 Resources for information on oral health and care

The results of the survey show that one third of teachers (37,5%) look for information on the Internet - it can be social networks, new articles, scientific sources, films, videos. A slightly smaller part (28%) receives information from their oral hygienist, and the fewest respondents answered that the source of information is mostly television (18,5%) and books (15,5%).

It can be said that educators are interested in children's oral care issues, the sources of information are quite diverse, so they receive different and useful information. It is also possible to get new ideas in various groups of social networks on how to broadcast the necessary information about oral care to children in a more interesting way. By the way, their knowledge can also be shared with colleagues.

The summarized results show that educators in the educational institutions where they work, most often notice changes in the colour of the teeth and tooth decay in the mouth of children. Children express complaints about aching teeth to educators infrequently. About the observed changes in children's mouths, mostly specialists of pre-school education institutions inform the children's parents or persons responsible for them.

In almost all educational institutions of respondents where they work, children are told about the importance of oral health. This is usually done twice a year or even once a week. Children in kindergartens are encouraged to take care of their teeth, active activities on this topic are carried out. In the opinion of educators, they have enough knowledge on the topic of oral health, but would like to gain more. When searching for information on their own and interested in oral health and care, educators usually search for new information on the Internet or receive information from their oral hygienist they visit.

DISCUSSION

Improving oral health in children's educational institutions is not a novel approach, although little has been described. In the field of education, researchers have found that two factors can figure out health promotion. Firstly, education (literacy) depends on it because the approach to preserving health and fostering health as a value depends on it. Secondly, educators working in a children's educational institution can supply knowledge, improve attitudes and skills related to health-risky behaviours, and at the same time strengthen health (Cutler & Lleras-Muney, 2006). This is also true when it comes to oral health. This study focused on the activities of preschool teachers, which are important in shaping children's attitudes and behaviours that help preserve oral health. Therefore, the aim was to find how preschool teachers help to fulfil the goals of health promotion programs.

Preschool teachers talk about maintenance of oral health, carry out active activities involving children, and encourage brushing their teeth. Therefore, it is important that they get sufficient knowledge on the subject and be able to apply it properly. In addition, knowledge needs to be updated and supplemented. Cooperation with specialists in other fields, the organization of profession development events would help educators to become even more actively involved in children's oral health promotion activities. The conducted study showed that many educators expressed a desire to get new knowledge about supporting oral health.

Limitation. This study has limitations. Educators were selected regardless of their professional experience, so it is not clear which educators pay more attention to the education of children's personal oral hygiene. In addition, the reasons why children do not brush their teeth in the educational institution were not analysed. It is understood that children's educational institutions are not designed to provide health care, but oral health promotion activities can be carried out with the involvement of preschool teachers in kindergartens.

CONCLUSIONS

- In pre-school educational institutions, children are motivated to take care of their oral health, this is discussed at least once a year.
- Children's behaviour is initiated in separate ways: watching videos, performing various tasks and playing games.
- Most preschool teachers have sufficient knowledge of children's oral health care and express an initiative to gain new knowledge.

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