

# ATTENDANCE OF DENTAL HYGIENISTS IN EDUCATIONAL ACTIVITIES RELATED TO THE PREVENTION OF DENTAL DISEASES: A QUALITATIVE INTERVIEW STUDY

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**Abstract.** Dental hygienists are important members of the dental team in promoting and maintaining the oral health of patients. They carry out educational, therapeutic, and preventive activities. **The aim** of this study is to analyse the attendance of Lithuanian dental hygienists in educational activities related to the prevention of dental diseases.

Dental hygienists were invited to be part of a qualitative research project which involves individual semi structured interviews. Interviews were recorded (audio and video) and later transcribed. Interviews were conducted with seven dental hygienists. A thematic analysis of data from the interview was performed. Five themes were extracted from the contents. Two themes are observed in this article: participation in prevention programmes and changes are needed for dental diseases prevention. Conclusions: Dental hygienists attend children educational institutions and other communities for educational dental prevention purposes. Dental hygienists are involved in educational activities, usually on their own initiative, receiving no reward for this work.

**Key words:** dental hygienist, prevention of dental diseases, educational activities.

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## INTRODUCTION

The specialty of dental hygienists was developed in the United States of America by doctor A. Fones. He sought to have a dental hygienist who first teaches patients personal oral hygiene, as this is one of the factors that can reduce the spread of dental diseases. This story began in 1906 (Fones, 2013). A lot of time has passed since then, many scientific discoveries have been made, technology has evolved and improved. Research processes are ongoing and do not stop. However, although the profession of dental hygienist has existed for many years, the prevalence of dental diseases still remains high, with many people experiencing toothache, bleeding gums, and cancerous changes in the mouth (Peres et al., 2019).

Lithuanian dental hygienists' profession history counts for the third decade. Since 1995, when the first dental hygiene specialists graduated, a lot of time has passed, during which the profession has gained more than 1,200 people (Rėderienė et al., 2021).

However, during this period the oral health of the Lithuanian population has not improved and the incidence of dental and gum diseases is high (Žemaitienė et al., 2016; Bendoraitienė et al., 2017). The question is why is there such a situation in a country with so many dental hygienists? Approximately 2330 residents of the country belong to one dental hygienist from the statistical side (Rėderienė et al., 2020). It is important to note that there is no continuous prevention of dental diseases in Lithuania. Dental hygienists visit children's educational institutions only in rare, isolated cases, there are no educational preventive activities organized. Without preventive action, treatment and rehabilitation of dental diseases will require even higher costs (Jevdjevic et al., 2021).

An assessment by researchers at the Institute of Hygiene in Lithuania shows that “the prevalence of deciduous and permanent tooth decay in preschool children could be reduced with pre-school and school-based dental cleaning programs”, and “the prevalence of dental caries and plaque can reduce when health education is provided in schools and educational and motivational interventions for their parents are made”. The report also highlights the cost-effectiveness of these measures (Comprehensive evaluation report, Higienos institutas, 2019).

Dental hygienists are especially important members of the dental team. They play an important role in promoting and maintaining the oral health of patients. They carry out educational, therapeutic, and preventive activities. It is noted that Lithuanian dental hygienists are little involved in preventive educational activities. They work mainly in private practices and do scaling and bleaching for patients visiting dental clinics (Rėderienė et al., 2020).

There are no dental hygienist positions established in children's educational institutions. In addition, according to the documents in Lithuania, a dental hygienist may perform activities only in a health care institution licensed for dental hygienist services (The order No. V-707 of the Minister of Health of the

Republic of Lithuania, 2019). Therefore, even if a dental hygienist wanted to work in an educational institution, his/ her activities would not be legal, as no childcare institution has an additional license to carry out other activities, such as personal health care. A notable limitation – while there are enough specialists in Lithuania, they do not fulfil their assigned activities, because they are not legally able to do this.

This pilot study will help to find if dental hygienists attend children educational institutions for educational dental prevention purposes. How are they involved in this activity? Are they ready to do a prevention job?

**The aim** is to analyse the attendance of Lithuanian dental hygienists in educational activities related to the prevention of dental diseases.

**The study tasks are:**

1. To find if dental hygienists attend children educational institutions (or other communities) for educational dental prevention purposes.
2. To analyse how dental hygienists perform primary dental prevention activities.
3. To single out the changes expressed by dental hygienists due to the organization of educational prevention of dental diseases

## THE RESEARCH METHODS

By using the qualitative approach (an interview), the dental hygienists' experience towards educational activities related to the prevention of dental diseases were collected. The study question was “How dental hygienists are involved in educational activities for the prevention of dental diseases in Lithuania and what is their input to prevention?”.

Ethical approval was obtained from the Ethics Committee of the Faculty of Dentistry of the University of Lisbon (CE-FMDUL), code number: CE-FMDUL202143, July 5, 2021.

**The study population.** The participants were dental hygienists, who have expressed a desire to participate in the study or who have been invited by the author of the study.

The inclusion criteria were: graduated 3 years ago and later, has a dental hygienist's license and agrees to participate in the study.

The eligible participants were contacted and invited to participate in the interview by the author using the private dental hygienists social media group and by telephone numbers making an arrangement for meeting. Detailed information including the purpose, procedure, and significance of conducting this study were explained to the participants during the phone calls.

Written consent was obtained by using E-forms when participants received the link for joining the Zoom meeting.

**Data Collection.** A topic guide for the interview was developed around the research question. It provided a framework for semi structured interviews. However, participants could also raise issues outside the framework that they considered to be important.

The main themes were: understanding speciality, personal qualities, the practical activities carried out by dental hygienists, participation in prevention programmes and dental diseases prevention in Lithuania evaluation and changes. Only two themes will be observed in this article: participation in prevention programmes and changes are needed for dental diseases prevention.

The interview was conducted in an advance prepared plan, deepening the conversation and supplementing it with significant and relevant questions.

Zoom meetings took place at a time chosen by the participants. The information was collected in July 2021.

**Data analysis.** The records of the interviews were transcribed to the MS Word texts. Thematic content analysis was performed. The main themes and sub-themes emerged from the data.

A unified “pre-set” coding framework was developed when coding on the transcription of the first and second interviews and the thematic interrelation was discussed to attain agreement. To ensure the inter-coder agreement, the author continued to code the other five transcriptions using this framework and the “emergent” codes were discussed, compared and matched afterwards.

Quotations were selected to illustrate the observed themes and sub-themes.

## RESULTS

**Sample characteristics.** Interviews were conducted with seven dental hygienists. Three dental hygienists expressed a desire to participate in the study after being invited on social networks. Four dental hygienists were invited to participate in an interview by telephone calls, and all of them agreed to participate.

Every interview was coded by assigning a number from R1 to R7, these indicators are used in the table of themes and sub-themes and in the interpretation.

Table 1

**Characteristics of the participants**

<i>Participant's code</i>	<i>DH work experience (years)</i>	<i>Work in private practice</i>	<i>Work in municipality clinic</i>	<i>Educational institution, where DH speciality was obtained</i>
R1	10	Yes	No	Utena University of Applied Sciences
R2	19	Yes	Yes	Panevėžys higher medical school and Kaunas University of Applied Sciences
R3	9	Yes	No	Kaunas University of Applied Sciences
R4	7	Yes	Yes	Lithuanian University of Health Sciences
R5	13	Yes	No	Lithuanian University of Health Sciences
R6	22	Yes	No	Lithuanian University of Health Sciences
R7	7	Yes	No	Panevėžys University of Applied Sciences

All participants were women. Their practical experience in the dental hygienist profession ranges from 7 to 22 years. Study participants work in private practice, two of them work in private and municipality clinics.

**Themes and subthemes on dental hygienists educational activities related to the prevention of dental diseases.** After the analysis of the obtained information, the information revealed 2 research themes, which were later divided into certain subthemes. Table No. 2 presents themes, sub-themes and statements which illustrate them.

Table 2

**Themes, Subthemes and Statements Derived from Interviewers**

<i>Themes</i>	<i>Sub-themes</i>	<i>Statements</i>
1. Participation in prevention programmes	1.1. Experience of educational activities	<p>“&lt;...&gt;was a program organized by the clinic.” [R1]</p> <p>“There was schoolchildren training with the Public Health Office” [R2]</p> <p>“I did not participate in the prevention program &lt;...&gt; a friend worked in a day center and invited me.” [R3]</p> <p>“Dental sealing” [R4]</p> <p>“If at the state level, I wasn't involved. But &lt;...&gt; in project activities.” [R5]</p> <p>“When I was teaching in college, we were actively involved.&lt;...&gt; we gave lectures to both children and parents.” [R6]</p> <p>“I participated with a dentist in a children's dental care program.” [R7]</p>
	1.2. Preparation for educational activities	<p>“I should think maybe ... what to say” [R1]</p> <p>“As much as I hire, I will go.” [R2]</p> <p>“I am 100 percent ready.” [R3]</p> <p>“Not every day, but every other day” [4]</p> <p>“I can do this activity in all expressions.” [R5]</p> <p>“It's hard to answer because I'm doing a lot of clinical work right now.” [R6]</p> <p>“It's just in our dental office.” [R7]</p>

	1.3. Feeling in the educational activities	<p><i>“I liked it, I always wanted to come back.” [R2]</i></p> <p><i>“I like it...” [R4]</i></p> <p><i>“Very great.” [R5]</i></p> <p><i>“I feel good.” [R6]</i></p> <p><i>“Not very good.” [R7]</i></p>
	1.4. Training tools	<p><i>“As much as I was preparing, I said a third.” [R1]</i></p> <p><i>“I made slides, collected photos by myself, selected videos.” [R2]</i></p> <p><i>“Every time I was getting ready for something new.” [R3]</i></p> <p><i>“And I make the slides myself, I have to keep updating.” [R4]</i></p> <p><i>“I myself published a booklet for children about dental care. But that information is missing.” [R5]</i></p> <p><i>“I have prepared memos for teachers as well.” [R6]</i></p> <p><i>“I have material from seminars, from textbooks. [R7]</i></p>
2. Changes are needed for dental diseases prevention	2.1. Involvement of dental hygienists	<p><i>“&lt;...&gt;encourage finance. If it were paid for.” [R1]</i></p> <p><i>“But everything is based on money.” [R2]</i></p> <p><i>“&lt;...&gt;and dentists might say let’s enlighten people ... clinic managers as well.” [R3]</i></p> <p><i>“dentists would encourage dental hygienists” [R4]</i></p> <p><i>“&lt;...&gt;financial incentives” [R5]</i></p> <p><i>“Desire is needed, and wages.” [R7]</i></p>
	2.2. Support / measures needed	<p><i>“They should have that sample to get”. &lt;...&gt; I miss even the simplest educational posters.” [R1]</i></p> <p><i>“To get dentists involved” [R4]</i></p> <p><i>“From the state &lt;...&gt; programs such as varnishes, fluoridations are carried out.” [R4]</i></p> <p><i>“&lt;...&gt;involvement of the social partners, &lt;...&gt; state involvement” [R5]</i></p> <p><i>“maybe clinic managers would encourage...” [R7]</i></p>
	2.3. Special training	<p><i>“those dental hygienists who go to groups should be trained.” [R2]</i></p> <p><i>“as soon as they enter study more emphasis on that educational activity” [R5]</i></p> <p><i>“&lt;...&gt;there should be certain disciplines from the beginning of studies” [R6]</i></p>
	2.4. Changes	<p><i>“Change of attitude: The hygienist is identified with the dental assistant” [R6]</i></p> <p><i>“There is no repetition for you to go back again and again.” [R2]</i></p> <p><i>“Working with pregnant women” [R2]</i></p> <p><i>“&lt;...&gt;clinics can be encouraged. [R3]</i></p> <p><i>“&lt;...&gt;mobile service &lt;...&gt; financial coverage” [R5]</i></p> <p><i>“To focus work on prevention rather than secondary level.” [R6]</i></p>

## 1 THEME Participation in prevention programmes

### 1.1. Subtheme Experience of educational activities

In Lithuania, there is no permanent educational prevention of dental diseases at the state level.

One of the important activities of a dental hygienist is educational activities. Respondents were asked to share experiences about their attendance in educational activities.

*“Once there was a program organized by the clinic. We brought an intraoral camera to the supermarket. Dental hygienists inspected and told people about their problems, and taught them how to brush their teeth.” [R1]*

*“There was training for schoolchildren with the Public Health Office ... toothbrush management. Not even what is healthy, what is unhealthy, but just mechanical brushing, which was not the case before ... I was very happy with this program. Each child got a toothbrush and they sat, cleaned, and I approached each one and adjusted their movements.” [R2]*

*“I did not participate in the prevention program. But I started my educational activities because my friend worked in a day center in a district and she invited me. And said that some children did not even see the toothbrush and asked to come and to tell the children how to care for their teeth. That’s what I did a couple of lectures. <...> I thought it was all over. And then I got a call from the director of the Public Health Office. And I also gave a couple of lectures to specialists and then I started to be invited everywhere:*

initially to kindergartens, to schools. Later, I also received an invitation from the district public health office to give lectures in schools in the district as well. And I have taught adults.” [R3]

“Only in dental sealing programme.” [R4]

“If at the state level, I wasn’t involved. But since I also work in high school, we participate in project activities with students. If it can be affirming as a preventive educational activity. Project applications were also submitted for oral health of older people, oral health of children with disabilities. Not in programs, but in project activities I participated in.” [R5]

“When I worked in College, we had a lot of all kinds of programs and we were actively involved. <...> we travelled to kindergartens and then gave lectures to both children and parents and we did it for maybe half a year. Everything is fine with the children. The problem is with parents. And we realized the lack of educational activities for parents.” [R6]

“I participated with a dentist in a children’s dental care program. But it stopped. We tried to start something with the Public Health Office, but that activity didn’t work out. We had plans, but they were not realized. [R7]

The responses indicate that dental hygienists are or have been involved in preventive educational activities, in many cases on their own initiative or at the initiative of the dental institution where they work.

### **1.2. Subtheme Preparation for educational activities**

Survey participants were asked to tell how much they themselves are prepared and how willing they are to carry out educational activities. It was observed that the answers of some respondents differ.

“If I had to stand up and talk for a moment, maybe I couldn’t. I should think about what to say. Because really ... I think I would say the same thing I say in my office, what I say to a newcomer. Depends on how the group would react to me.” [R1]

“As much as I hire, I will go. I really like it. <...> And not even with young children, but with older children I find it very interesting to work. <...> I held meetings for parents. Because in kindergarten, I refused to work with the kids because I said the kids know everything, but they don’t do anything. Parents need to be informed because parents are not motivated.” [R2]

“I am 100 percent ready. <...> It’s not very hard for me anymore. <...> I want at least one or two students from the class to have something memorized and for at least one child to start brushing their teeth better.” [R3]

“Not every day, but every other day. <...> I have that feature.” [R4]

“I can do this activity in all expressions. <...> I have the opportunity to use both materials and tools. And I’m receptive, communicative myself, so I’m really ready.” [R5]

“It’s hard to answer because I’m doing a lot of clinical work right now That massive educational activity maybe someday... I don’t need it in the clinic. But that doesn’t change the problem. But in the academic community, this is naturally happening and involved in that.” [R6]

“It’s just in our dental office.” [R7]

Summarizing the answers, it can be seen that dental hygienists carry out educational activities, they are happy with the ability to carry it out and are ready for this work. While others need extra preparation for training.

### **1.3. Subtheme Feeling in the educational activities**

Everyone has their own character traits and abilities that they apply in their professional activities. In order to achieve quality activities, it is important that the employee feels confident in his or her own strength and satisfaction. Therefore, respondents were asked how they feel about their educational activities. Many indicated that they feel good while teaching patients.

“I liked it, I always wanted to come back. For me, the time you go to school for a couple of months from morning to evening is a kind of “good”. Not feeling tired is the most important thing.” [R2]

“I like it, I relax, I recover, I interact with people. <...> And I also feel very good in front of the audience. You feel like helping people by answering questions. Those tips are helpful. The more questions, the more you feel that the lecture was helpful.” [R4]

“Very great. <...> Because that’s how I feel like a fish in the water, that’s my area and I feel great.” [R5]

“I feel good. Only I am sad for adults. Everything is fine with the children. But adults are hostile. When you tell the information, they will find a way to deny it. Lots of information is on YouTube, Google. And they argue.” [R6]

*However, as in all areas, there was a conflicting view:*

*“Not very good. I prefer when we interact with a patient one on one. I find it difficult to communicate and manage with the group.” [R7]*

#### **1.4. Subtheme Training tools**

Training tools and methodological material are needed to ensure that the information provided is properly understood. Survey participants were asked to indicate what tools they use for training.

*“I went to kindergarten with very young children. That’s actually as much as I was preparing, I said a third because I needed to be interested in it differently. But everything went well by itself. <...> Once I was in a rural school, the children were very eager to listen. But then they said they don’t even have a toothbrush at home. It’s good that I had those brushes and gave them away.” [R1]*

*“I made slides, collected photos myself, and selected videos. I collected and did it myself. And for the first time, I just recently got a video, a USB key, information, a slide, i.e. added what I hadn’t received before.” [R2]*

*“Perhaps the hardest part was preparing the lectures for different age groups to make them interesting and engaging. It was always preparing something new every time until I finally now have slides for any age group. This means I no longer have to prepare for a new one.” [R3]*

*“Of course we have models, brushes. <...> And I make the slides myself, I have to keep updating them, because the situation is changing, as it is with medicine. And everything else and we bought and received gifts.” [R4]*

*“I myself published a booklet for children about dental care. But that information is missing. Patients lack information about motivation.” [R5]*

*“I take it from work. The dental clinic is happy to lend. The company is very happy to help and give samples. When I bought something myself. Because visual means are better than verbal ones. And very important for children. I have prepared memos for teachers as well.” [R6]*

*“I have something - and how else? I have material from seminars, from textbooks. Show such pictures. I still have a model, brushes and pictures.” [R7]*

Summarizing the answers provided, it can be seen that many oral hygienists develop and prepare tools for educational activities themselves. Quality training material is important for good results, so it can be said that this is another activity that oral hygienists are involved in. Examples of instruments, models are obtained from dental clinics where they work or from representatives of companies.

## **2 THEME Changes are needed for dental diseases prevention**

### **2.1. Subtheme Involvement of dental hygienists**

Respondents were asked what would encourage dental hygienists to become more involved in the educational activities of dental disease prevention.

*“I think most would be encouraged by finance. If it were paid for. You can go from charity once or twice or have to be a very enthusiastic scientist. Certainly most will not. <...> There should be a whole system of thought, methodological tools, incentives, samples, all that system.” [R1]*

*“Dental hygienists are willing to get involved in this activity. Just trying to take the time to discover how to help. But everything is based on money. You waste your time and you don't get a euro. <...> That's the problem here.” [R2]*

*“I don’t know... if training material were prepared, maybe people would really get involved. Association of dental hygienists, dentists could say let’s enlighten people ... clinic managers as well. Because, in fact, it takes time to prepare for lectures. And if the employer is still dissatisfied that you go out to give a lecture during work, then the dental hygienist does not even have time ... Or you will not receive a salary for giving lectures. <...> I think a dental hygienist alone can't do anything ... If the employer is against it, then you really won't. I think employers, clinics can encourage more to conduct those lectures.” [R3]*

*“It depends on the attitude of the dental hygienist. <...> It would be very good for dentists to encourage dental hygienists to carry out this activity. Earlier, doctors told me that when a child visits, I would definitely explain the importance of prevention.” [R4]*

*“Probably financial incentives should be promoted first. Here is the best for today's man. <...> But everyone is now attracted to the reward: what I get for. But not necessarily a financial expression - it can be events, seminars, trips.” [R5]*

*“I think for some it is given. They just want to do it and bravely stand up to the group and teach. Their personal qualities are as follows. Still maybe the desire is needed, and wages.” [R7]*

Analysing the responses, it was observed that wages would primarily encourage dental hygienists to engage in educational activities. The involvement of social partners or institutions employing dental hygienists was also mentioned. The training tools that dental hygienists usually prepare themselves are important; which is a time-consuming job for which there is no reward. Survey participants would also like encouragement from dentists.

## **2.2. Subtheme Support / measures needed**

The interviews focused on the help and support needed by dental hygienists to make educational activities more active. The interviewees pointed out the importance of oral care measures provided by the social partners and the involvement of the government in educational activities.

*“They are very tempted if they get something. If you're talking about a specific tool, they should have a sample <...> I sometimes miss even the simplest educational posters. <...> I really like all the models, the ones where the teeth are removed, where you can show what is a crown, what is a filling, what is an implant, what is plaque. <...> Visual things.” [R1]*

*“I no longer lack information. But it is very difficult for a beginner and he needs pictures, methodological material to be able to read.” [R2]*

*“To get dentists involved. And from the government, <...> programs must be organized and run. Brushes and pastes or gels should be donated. And maybe programs such as varnishes, fluoridations. What we gave up...” [R4]*

*“And the involvement of the social partners is very important, these small gifts, as far as attracting, speak, that dental hygienists are important. State involvement, where the Ministry of Health invites to participate in programmes to make dental hygienists visible and audible.” [R5]*

*“Maybe clinic managers would encourage...” [R7]*

## **2.3. Subtheme Special training**

An important factor was identified - training programs for dental hygienists, which would help to better prepare for educational work with different groups of people. Special training for dental hygienists must take place from the beginning of the study, the participants of this study also noticed.

*“But I think those who go to give lectures should take separate courses - both psychological and practical. <...> In particular, those dental hygienists who go to groups should be trained.” [R2]*

*“Maybe we should from the beginning, as soon as they enter to study, put more emphasis on that educational activity.” [R5]*

*“This should be from the beginning of studies. There should be certain disciplines from the beginning of studies. <...> I have noticed that some dental hygienists are capable of manipulating, but they fail to speak in front of the group.” [R6]*

In summary, in order to effectively implement educational prevention, not only training tools are important, but also special training for dental hygienists to help prepare for this activity.

## **2.4. Subtheme Changes**

One respondent mentioned another important factor – today's approach to the profession of dental hygienist.

*“First, change of attitude: to this day, a dental hygienist is identified with the dental assistant. The motivation of many hygienists is falling. <...> If you assist in the clinic for half a day and do two more hygiene, what is the motivation to improve here? When a hygienist works in a clinical job, then he wants to get involved in educational activity, then it is really much better.” [R6]*

Recently, in Lithuania, dental hygienists often perform the functions of a dental assistant, therefore their competence and qualification suffer, and they are less involved in educational preventive activities.

Other changes that dental hygienists expect are:

*“There is no repetition, you cannot go back again and again. It's missing you repeat all the time. <...> And my dream is to work with pregnant women. <...> Such practical educational work. That's what I'd say we should start with pregnant women.” [R2]*

*“I think a dental hygienist alone can't do anything. If the employer is against it, then you really won't. I think employers, clinics can encourage more to conduct those lectures.” [R3]*

*“There must be mobile services - not hygiene, but educational activities of mobile services. Go to people, to communities. This is very valuable. And there must be financial coverage.” [R5]*

*“In particular - the attitude of the Ministry of Health. To focus work on prevention rather than secondary level. <...> There should be a dental office in the school and a dental hygienist able to perform preventive procedures and if there are decayed teeth - then send him to a dental clinic. How much would we save ... Because everything at school would be both: clinical and educational. And now money is being wasted, but nothing is working, money is being wasted and we still stick to children's dentures.” [R6]*

Summarizing the answers, the main changes expected by dental hygienists are to start working with pregnant women, to increase the involvement of clinics, to strengthen educational prevention activities in order to be closer to communities by providing mobile services and to pay more attention to primary prevention. And it is important to provide a financial reward.

#### **Significance of this study**

This qualitative study can be used to change the situation in Lithuanian oral health prevention system and to involve more dental hygienists to participate in dental diseases prevention education activity.

Educational prevention work performed by dental hygienists reduces the risk of developing diseases, therefore less economic resources are needed for the treatment of diseases, in addition, it increases the availability of oral care services for the poor population (Dunker et al., 2014).

Recently, a holistic approach to personal health has prevailed, and oral health is inseparable from general health status. Signs of many diseases appear in the mouth. A dental hygienist can detect the first signs. The area of work of dental hygienists should be not only dental offices, but also obstetrics, pediatric departments, supportive care and nursing hospitals, oncology departments, which are frequently visited or treated by persons. A dental hygienist must be trained to recognize the signs of oral disease, provide assistance in the first signs of the disease, and direct the necessary treatment (A White Paper commissioned by the College of Dental Hygienists of Nova Scotia, 2014; Isringhausen, 2017; LeBeau, 2013).

However, dental hygienists in Lithuania may work only in institutions licensed to provide dental hygiene services. Therefore, it is necessary to review the legislation related to the organization and performance of dental hygienist activities by extending the possibility to carry out educational oral care activities not only in dental institutions.

Is it expected that health care providers also will pay attention to changes that are needed for educational activities related to the prevention of dental diseases (Monajem, 2006; Jepsen et al., 2017).

Funding must be provided and carried out on a continuous basis and not on an ad hoc basis (Dunker et al., 2014; Bae et al., 2020).

Dental hygienists are ready to work in the educational sphere, but there is no constant system of this activity. On the other hand, dental hygienists expect special additional training before starting to work with a group of different communities. Preparation to work with communities, the basics of public health education give dental care professionals more self-confidence and have a positive impact on their future professional careers (Lynch et al., 2011).

Research by other authors shows that comprehensive support for dental hygienists is very important. It should be provided centrally by organizations supervising the professional activities of dental hygienists, and by associations of dental hygienists and employers (Eckenswiller, 2015; Ohara et al., 2021).

As there are a lot of dental hygienists graduating every year in Lithuania, they start to work mostly in private practice. Some specialists are employed not for dental hygiene duties, but for dental assisting. That reduces their ability to improve competencies in dental hygiene and reduces motivation to work in dental diseases prevention and education. In addition, dental hygienists working as dental assistants, have been found to have poorer health self-esteem and relationships with colleagues and patients (Rėderienė et al., 2021). Therefore, it is important to change the attitude of dental hygienists themselves to this specialty.

Otherwise the population of Lithuania does not receive preventive educational services, although there are enough specialists who can provide them. And funding from the National Health Insurance Fund under the Ministry of Health are provided mostly for treatment of dental diseases and rehabilitation but not for prevention. Funding needs to be reviewed with a stronger focus on primary prevention (Peres et al., 2019; Naimi-Akbar et al., 2019; Aldosari et al., 2021).

#### **Strengths and limitations of this study**

Although the community of dental hygienists in Lithuania is quite large, their integration into the labour market is little analysed and assessed. In addition, there is no information on how many dental hygienists are involved in educational activities, how often and who funds these educational activities. As



this study has shown, dental hygienists need methodological assistance in preparing for lectures. Better results could be achieved if the social partners provided examples of oral care measures.

Only those dental hygienists who work within the competence defined in the documents participated in this study. Many survey participants have a positive attitude to carry out educational prevention activities and carry them out or have done.

The sample of 7 was sufficient to develop meaningful items for the dental hygienist's participation in educational activity. However, there was a limitation.

In Lithuania, the content of dental hygiene study programs is not strictly regulated, therefore it is not known what basic knowledge (skills) have been acquired by dental hygienists of different ages. For this reason, it is not clear what basic readiness the study participants have to carry out prevention activities in the community.

Returning to the limitations, perhaps the unequal motivation and admiration of the study participants for their profession may lead to some errors in the results.

## CONCLUSIONS

Dental hygienists attend children educational institutions and other communities for educational dental prevention purposes.

Dental hygienists are involved in educational activities, usually on their own initiative, receiving no reward for this work. Educational prevention of dental diseases is random, there is a lack of recurrence, and there is a lack of funding. It has been noted that there is a lack of involvement of the government and social partners in these activities. Training tools are prepared by dental hygienists themselves, using both their economic and time resources.

Changes are needed: government involvement by expanding the scope of activities so that educational prevention activities take place not only in dental care institutions, but also in other institutions (education, supportive care and nursing hospitals, etc.) in order to ensure a holistic approach to personal health and increase access to dental care services for remote and low-income populations. To increase the motivation of dental hygienists to engage in educational activities by providing reward and systematic, repetitive educational activities, crediting the clinical practice to extend the license during these activities, to organize special training for strengthening competencies.

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