

# Young children's ideas and practices towards oral health

DESPINA KLIMI, VASSILIKI ZOGZA

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Department of Sciences of Education  
and Early Childhood Education  
University of Patras  
Greece  
zogza@upatras.gr

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## ABSTRACT

*This qualitative case study aimed to investigate ideas and practices of 72 preschool children in relation to oral health, so that the findings would contribute to design learning environments. Data gathering techniques were structured interview and questionnaire. Most of children seemed to recognize and understand issues about oral health, although their actual behaviours seem to be moderate. Fewer children associated dental caries with sweets and even fewer attributed caries to poor oral hygiene and germs. Overall, preschoolers seem to understand cause and effect issues concerning oral health, facilitating design educational interventions for improving both knowledge and related healthy practices.*

## KEY WORDS

*Oral health, dental caries, children's ideas, oral health practices, pre-school education*

## RÉSUMÉ

*Cette étude qualitative visait à examiner les idées et les pratiques de 72 enfants d'âge préscolaire en matière de santé bucco-dentaire, afin que les résultats contribuent à la création d'environnements d'apprentissage. Les techniques de collecte de données ont été l'interview structurée et le questionnaire. La plupart des enfants semblaient reconnaître et comprendre les problèmes concernant la santé bucco-dentaire, bien que leurs comportements réels semblent modérés. Moins d'enfants associaient les caries dentaires à des sucreries et encore moins d'enfants attribuaient les caries dentaires à une mauvaise hygiène buccale et à des germes. Dans l'ensemble, les enfants d'âge préscolaire semblent comprendre*

*les relations de cause à effet concernant la santé bucco-dentaire, facilitant ainsi la conception d'interventions éducatives visant à améliorer les connaissances et les pratiques d'hygiène.*

## **MOTS-CLÉS**

*Santé bucco-dentaire, caries dentaires, idées des enfants, pratiques de santé bucco-dentaire, éducation préscolaire*

## **INTRODUCTION TO THE STUDY**

The importance of oral health for people's lives is unquestionable, since the low level of oral health has physical, psychological and social consequences for people's lives (Adu-lyanon & Sheiham, 1997; Sheiham, 2005), meaning that oral health and overall health are interrelated (Petersen et al., 2005).

Habits adopted during childhood and adolescence are critical for the oral health of the individuals for life (Makuch & Reshke, 2001; Oulis et al., 2009). Children's oral health in industrialized countries, as well as in Greece, has been improved significantly over the past decades; however, there are still matters that need to improve further (Marthaler, 2004; Oulis et al., 2009; Petersen, 2003). In Greece, the major oral health problems among children and adolescents are caused by dental caries (Agouropoulos et al., 2010; Boka, Trikaliotis, & Kotsanos, 2013; Oulis et al., 2009). Concerning the epidemiological situation of the oral health of Greek population, Oulis et al. (2009) found that Greece lags behind the rest of Europe when comparing the caries indices (data refer to EU-15 Member States). The poor oral health of the children is linked to knowledge about proper oral hygiene and problematic behaviour patterns. Indeed, according to the *Health Behaviour in School-aged Children (HBSC) study* conducted by WHO, Greek children who brush their teeth more than once a day classify Greece to places 28 (11 years), 29 (13 years), 31 (15 years) among 35 countries of the study (Maes, Master, & Honkala, 2004).

Family and school are factors that play a decisive role in shaping the views and attitudes of children regarding oral health. Parents are source of information and role models for their children. They guide and support the adoption of good daily habits and play a dominant role in decision-making, by determining the children's access to dental care (Hilton et al., 2007; Okada et al., 2002; Poutanen, et al., 2006; Tsami et al., 2007). On the other hand, school with the implementation of appropriate programmes and activities can contribute significantly to shaping the consciousness of children in favor of oral health (Kennev, 1979).

Oral health at school is approached through Health Education activities. According to WHO, health education is any combination of learning experiences designed to help

individuals and communities improve their health, by increasing their knowledge or influencing their attitudes (World Health Organization, 1994; 1997). The significant role of school in the acquisition of knowledge and the adoption of positive attitudes and behaviours regarding oral health are shown by the fact that health education at school is considered as primary prevention. Namely, health education constitutes a platform in order to reach all the children on time, before they develop habits harmful to their health, regardless their socio-economic class.

In practice, health education involves activities aiming to develop knowledge as well as activities for promoting positive attitudes to health through the development of students' abilities to reach an informed decision concerning their behaviour. The scientific background of health issues calls for the adoption of methods and techniques that derive from the theory of constructivism concerning the acquisition of knowledge. According to this theory knowledge is actively constructed by subjects; knowledge is not transferred and is not transmitted passively from teachers to students. Each one builds his/her knowledge depending on personal interpretations of the world and under the influence of their social/cultural environment (Driver & Oldham 1986; von Glaserfeld, 1989). Consequently, in order to design successful educational interventions towards oral health in the context of constructivism, it is necessary to take account of the prior ideas of the children on the subject. Some researchers have addressed the investigation of children's perceptions of caries (Al-Omiri, AlWahadni, & Saeed, 2006; Lian et al., 2010; Poutanen, Lahti, & Hausen, 2005; Smyth, Caamaño, & Fernández-Riveiro, 2007) but young children are absent from the research field, both in Greece and internationally.

Our literature review revealed that most of the existing articles concerning young children come from the area of pediatrics and dental medicine. These studies concern the state of children's oral health (clinically) or, in the best of cases, the investigation of their habits through their parents. The articles refer to factors contributing to the development of early childhood caries, such as biological and dietary (consumption of sugary foods), parental influence and social class (Boka et al., 2013; Gibson & Williams, 1999; Gussy et al., 2006; Hooley et al., 2012). Gibson and Williams (1999) concluded that regular brushing (twice a day) with fluoride toothpaste may be more effective than reductions of sugary foods intake; however, they suggested the necessity of research concerning the effectiveness of other interventions aiming to modify and shape behaviours.

Two research reports concerning young children in the context of health education were found. Antunes, Antunes and Corvino (2008) explored educative practices and attitudes of pre-school education professionals in Brazil. On the other hand, Makuch and Reschke (2001) stressed out the necessity of engaging pre-school children in oral health promotion programmes in parallel with other health education programs, since

habits adopted during early childhood are possibly maintained throughout life. They pointed out that health promotion is not an easy task when dealing with pre-school children and suggested that the developmental level of this age should be seriously considered in planning oral health promotion programs.

Although we have not found reports concerning younger children's knowledge of oral health issues, we believe they have ideas concerning the issue, as they receive stimuli from both the family and school environment. Even though the investigation of young children's ideas seems to be a difficult task, we think that with the appropriate methodology it is feasible (Cappello, 2005; Parkinson, 2001). The objective of this research effort, as formed from the above, was to investigate the ideas and practices of preschool children in relation to oral health, as a first step in shaping learning environments, and education activities for them.

## **METHODS**

This case study research was conducted in spring of 2013. The participants were 72 children (37 four-year-olds and 35 five-year-olds; 39 boys and 33 girls) and were recruited from 3 conveniently selected public kindergartens from the city of Patras. In addition, 60 parents of the surveyed children were involved, one of the parents responding for each child (the response rate was 83.3%).

Data were collected by performing individual structured interviews with the children, as well as by giving questionnaires to the parents in order to obtain information about issues children wouldn't be able to give. The questionnaires addressed to the parents were anonymous, thus parents' responses cannot be corresponded to children's.

### **Tools**

The questions of interviews concerned children's knowledge about oral health and its value, oral disease and particularly caries as well as to practices implemented in favour of oral health. The interview questions were set as shown in the Annex. Most questions were closed-ended, with multiple choice answers, which served as predetermined categories for the data analysis. Children were shown each alternative response option in a picture, so that it would be easier for them to understand the question and their options. The selection of pictures was guided by the style of books and pictures that are in use in Kindergarten. In the case of question 1, we selected to represent the concept of health with a child that is smiling, given the positive association between physical health and happiness (Easterlin, 2003; Piko & Bak, 2006). All pictures were discussed with children, in order to ensure that children really understood what was depicted on them. The responses of children were tape recorded, transcribed and analyzed.

Concerning the questionnaires which were addressed to the parents, the objective was to extract information about the practices followed by the children for good oral health. All questions were closed-ended, multiple choice and concerned the frequency of sugar consumption by the children, the frequency of tooth brushing, the parental role during tooth brushing, as well as any other actions beyond brushing and finally the reason and frequency of dental visits.

### **Data analysis**

Replies to open-ended questions were coded as it follows.

Concerning the *use of teeth*, children's responses formed the following categories:

- *Biting / chopping food*, for responses such as “to chew”, “to bite”, “to eat”;
- *Speech*, for answers like “to talk”; *Aesthetics*, for answers like “to smile”;
- *No function*, for answers like “nothing”; “*Do not know*”.

Concerning the *value of the oral health*, (question 4 “*Why do we want our teeth to be healthy?*”) the responses shaped the following categories:

- *Functional value*, which includes answers concerning biting and chopping food and speech; e.g. “to be able to bite”, “to be able to chew food”, “because we have to eat in order to live”, “to be able to talk”, etc.;
- *Aesthetic / psychological value*, for answers such as “in order to have a nice smile”, “teeth not to fall off and people not to call us toothless”, “teeth not to get spoiled and people laugh at us” etc.;
- *Overall welfare*, for answers like “in order to be happy”, “in order not to be in pain” etc.; *Avoiding dentist*;
- *Do not know*.

Regarding the children's knowledge about dental illness (question 7a), the responses created the following categories:

- *Dental caries*, when children were able to name the caries;
- *Descriptive answers for caries*, like e.g. “when teeth are yellow or black and we have them filled”, “microbes spoil the teeth when we eat candies...”, and “the one that sweets spoil teeth and microbes dig them”;
- *Descriptive answers for gingivitis*, such as “the one that the teeth bleed”;
- *Orthodontic problems*, such as “the crooked teeth”;
- *Changing baby teeth*, for answers like “the one that the tooth falls out and a new one comes out”;
- *Do not know*.

Their replies about caries (question 7b) were found to fall in three main categories as it follows:

a) What is dental caries:

- *Girl / Woman*;
- *Dental disease*, for answers like “it’s a disease of the teeth”;
- *Microorganism*, for answers like “it’s a microbe”, “it’s a bug” “it’s a small animal” etc.;
- *Unspecified*, for answers like “it’s something ...” “it’s a thing ...”;
- *Do not remember*.

b) What is its impact to the teeth:

- *Beneficial to the teeth*, for answers like “it cleans our teeth”, “it gets our teeth well”;
- *Harmful to the teeth*, for answers such as “it spoils the teeth”, “it pierces the teeth”, “it gets the teeth sick”, “it makes the teeth black” etc.

c) What is related to:

- *Poor oral hygiene*, for answers like “sticks on our teeth when we don’t wash them”;
- *Candies*, for answers like “we eat many candies and then it grows up”, “by eating chocolates and becomes strong” etc.;
- *Microbes* for answers like “is made by microbes”.

Children’s responses to question 8 created the following five categories:

- *Microbes that feed on sweets pierce the teeth*;
- *Sweets and microbes pierce the teeth*; this category joined responses of children that were aware that sugar affects the health of the teeth, acknowledged the microbe in the picture (including cases that children were unable to name it, e.g. “this little critter”, “the little bug” etc.) and the fact that the tooth is punctured, without understanding the relationship between sugar and microbes;
- *Sweets pierce the teeth*; this category included the responses of children acknowledging that sugar has impacts for teeth, also noticed the hole in the tooth, but did not refer to microbe at all;
- *Sweets turn the teeth black*; this category integrated responses of children that knew that sugar has negative effects to the teeth, such as “a black spot to the teeth”. Namely, they did not refer at all to microbe, or to the fact that the tooth is pierced;
- *No impact*, when no effect on tooth was recognized.

The responses of the children to question 9, concerning the symptoms of dental disease, formed the following categories:

- *Appearance*, for answers such as “the tooth will get black”, “the tooth will have a hole”, “the tooth will seem dirty”, “the tooth will be rotten” etc.;
- *Pain*, for answers like “the tooth will hurt”;
- *Loosening*, for answers like “the tooth will be moving”;
- *Irrelevant*, for answers like “it will have fever”;
- *No symptoms*, for answers like “you won’t understand”;
- *Do not know*.

## RESULTS

### ***Ideas about oral health***

Starting with children's *ideas about overall health*, the vast majority chose as healthy the smiling child (picture b), in percentage 94.4%. In addition, 86.1% of the children were able to perceive oral health as part of overall health.

According to the children's opinion, the main use of teeth is to *bite / chop food*, in percentage 93.1%, followed by 16.7% of children that stated *speech* and a very small percentage, 2.8%, that mentioned *aesthetics*. Finally, also very small percentages of children did not know the use of teeth (2.8%), or could see no function at all (1.4%).

As for the value of oral health, 50% of our informants responded that we need our teeth to be healthy for functional reasons. Still, many children (26.4%) claimed that healthy teeth contribute to the overall health and welfare of people and at a lower percentage (16.7%) children invoked aesthetic / psychological reasons. Finally, very few children reported “avoiding the dentist” (4.2%). In summary, most of the children participants in this study were able to recognize a certain value of oral health and to invoke specific reasons about the need to have healthy teeth.

Children in general were able to recognize and understand the featured pictures about brushing, visiting the dentist and eating candies. In contrast, fewer than half of the children were able to recognize flossing (45.8%) and only a quarter of the sample recognized the use of mouthwash. Children appeared to have misconceptions about those when asked. Specifically, the majority (80%) of the children who expressed some opinion about flossing thought that it is a “rope” for removing our teeth. Respectively, the majority (70.4%) of children who expressed some opinion about mouthwash claimed that it was some kind of syrup for illness generally.

Regarding the practices that should be implemented for healthy teeth (Table 1), all children found brushing necessary, while a quite high percentage (77.8%) supported the necessity of visiting the dentist. Still, several children (68.1%) indicated that people

should avoid consuming candies. Finally, over half of the children (51.4%) were in favor of the use of dental floss, while only 25% supported the use of mouthwash. Regarding dental floss, we must notice that the percentage who responded in favor of its use is slightly higher than that of the children that were aware of its utility (45.8%). This probably means that children who previously did not know the exact utility of dental floss suspected that it does some good to the teeth, thus they responded in favor of its use.

**TABLE 1**

*Children's ideas about practices that **should** be implemented to keep healthy teeth (N=72)*

<b>Ideas</b>	<b>Frequencies</b>	<b>Percentages (%)</b>
Mouthwash	18	25,0
Brushing	72	100,0
Dental visits	56	77,8
Avoiding candy	49	68,1
Flossing	37	51,4

Regarding children's knowledge about dental illness (question 7a), almost half of children (48.6%) stated ignorance, while only a low percentage of children (6.9%) managed to name dental caries. However, several children (40.3%) tried to answer the question descriptively. Thus, by summing the percentage of these children with the percentage of children who were able to name caries it seems that about half of the children (47.2%) were able to mention caries even descriptively. Finally, there have been isolated cases who reported descriptively gingivitis, orthodontic problems, and the changing of baby teeth.

Their knowledge about caries was organized around three axes, i.e.: a) What is dental caries, b) What is its impact to the teeth and, c) What is it related to. Children's replies as to what is dental caries (Table 2) gathered around the categories of "microorganism" and "Undefined" (19 and 21 children respectively, out of 72). Several children (15/72) gave anthropomorphic answers claiming that dental caries is girl or woman, and only 3 children said that it is an oral disease. Most children (52/72) referred to the bad effects of tooth decay. Finally, several children (18/72) linked caries to sweets and fewer reported poor oral hygiene and microbes.



**TABLE 2**

*Children's replies about dental caries (N=72)*

Ideas about dental caries		Frequencies	Percentages (%)
What is dental caries		63	87,5
	Do not remember	5	6,9
	Girl / Woman	15	20,8
	Dental disease	3	4,2
	Microorganism	19	26,4
	Undefined	21	29,2
What is the impact to the teeth		54	75,0
	Beneficial to the teeth	2	2,8
	Harmful to the teeth	52	72,2
What is related to		31	43,0
	Related to poor oral hygiene	7	9,7
	Related to candies	18	25,0
	Related to microbes	6	8,3

Concerning the impact of sugar on teeth, the responses of children revealing children's understanding and interpretation of the picture in question 8 are presented in Table 3. The vast majority of the sample (91.7%) was able to recognize the negative impact of candies to the teeth; however, the percentage of children who were aware of the holes in the teeth, fell to 72. 2%. Children who were able to recognize the microbe in the picture were 54. 2%, but only 30.6% seemed to understand that microbes feed on sweets, namely gave a complete answer. Finally, 8.3% of the children did not recognize any effect on teeth.

**TABLE 3**

*Recognizing the effects of sugar consumption for teeth in the picture (N=72)*

Ideas	Frequencies	Percentages (%)	Cumulative Percentages (%)
Microbes that feed on sweets pierce the teeth	22	30,6	30,6
Sweets and microbes pierce the teeth	17	23,6	54,2
Sweets pierce the teeth	13	18,1	72,2
Sweets turn the teeth black	14	19,4	91,7
No impact	6	8,3	100,0

As for the symptoms of dental disease, most children (86.1%) claimed that one can understand a sick tooth from its appearance while a quite significant percentage (43.1%) referred to pain. A few children (8.3%) were for loosening of teeth and finally some children (4.2%) responded that a sick tooth won't have any symptoms.

Children appeared to have a positive opinion (56.9%) concerning dental visits. However, the percentage of children who did not like visiting the dentist (41.7%) and referred to fear (30.6%) is quite high, which is probably the case of a negative experience that they or a person of their environment had. These highlight the necessity for dentists to provide positive experiences for young patients, since the attitudes established in childhood are difficult to change later.

### **Practices about oral health**

In regard to the *practices* implemented by the children for good oral health, *according to themselves*, all children replied that they brush their teeth, and this seems to be the main practice followed, since the percentages for other practices are low (Table 4). Specifically, slightly more than one third of the sample (34.7%) responded that they visit the dentist and only few children claimed that they avoid candies and use dental floss (12.5% and 8.3% respectively).

**TABLE 4**

*Children claims about the practices implemented for good oral health (N=72)*

<b>Claimed practices</b>	<b>Frequencies</b>	<b>Percentages (%)</b>
Mouthwash	0	0
Brushing	72	100,0
Dental visits	25	34,7
Avoiding candy	9	12,5
Flossing	6	8,3

On the other hand, regarding practices implemented by the children according to their parents the vast majority (96.7%) responded that the practice followed by their children is brushing, while two parents (3.3%) responded that their children do not follow any practice for dental hygiene.

Concerning the frequency of brushing according to their parents (Table 5), most of the children (55%) brush their teeth once a day. However, the percentage of children who brush their teeth at least twice a day, as recommended by experts, does not exceed one third of the sample (31.6%). Still, a few children (10%) brush their teeth in non-daily basis, while there are still children (3.3%) that never brush their teeth. 86.2% of them brush their teeth under the supervision of their parents.

**TABLE 5**

*Frequency of tooth brushing according to parents (N=60)*

<b>Frequency of brushing</b>	<b>Frequencies</b>	<b>Percentages (%)</b>	<b>Cumulative Percentages (%)</b>
More than twice a day	5	8,3	8,3
Twice a day	14	23,3	31,6
Once a day	33	55,0	86,6
Less than once a day	6	10,0	96,7
Never	2	3,3	100,0

Regarding the frequency of sugar consumption (Table 6) most of the parents (55%) responded that their children consume sugary foods 2-3 times per week. Moreover, more than one third of parents (35%) responded that their children consume sugary products daily, at least once a day. Finally, only a few parents (10%) claimed that their children consume sugary products once a week.

**TABLE 6**

*Frequency of sugar/candies consumption according to parents (N=60)*

<b>Frequency of sugar consumption</b>	<b>Frequencies</b>	<b>Percentages (%)</b>	<b>Cumulative Percentages (%)</b>
More than once daily	5	8,3	8,3
Once daily	16	26,7	35,0
2-3 times per week	33	55,0	90,0
Once a week	6	10,0	100,0

Regarding children's visit to the dentist, 53.3% of parents responded that their children go to the dentist once a year. More interestingly, it seems that less than one quarter of them (23.3%) claimed that their children visit the dentist every six months. Finally, a few parents (15%) responded that their children visit the dentist less than once a year, while there were some parents (8.3%) who said that their child never goes to the dentist.

As for the reason for visiting the dentist, most parents (87.3%) claimed that their children visit the dentist for routine check and some parents (7.3%) responded for orthodontic work. Finally, it seems that only two parents (3.6%) referred to pain as the main reason to visit the dentist.

## DISCUSSION

Overall, most children in this study seem to recognize the value of oral health. Regarding dental disease, almost half of the children in the sample (48.6%) declared ignorance, while a similar proportion (47.2%) managed to speak about caries even descriptively. Furthermore, some of the children's misconceptions are of interest, where orthodontic problems and the changing of baby teeth are considered as an oral disease.

Regarding children's knowledge about dental caries, 82.5% referred to its negative effects on teeth. One third of the sample stated that it is a microorganism and several children (23.8%) having been influenced by books and stories about teeth and dental caries provided anthropomorphic answers. Finally, several children (28.6%) associated dental caries with sweets, as well as with poor oral hygiene and germs (11.1% and 9.5% respectively). As these correct ideas are expressed by a sufficient portion of children it appears that they are not out of the reach for children of this age; ideas consequently, we think that they could be points of emphasis in oral health programs.

We consider as positive the fact that most of the interviewed children were capable to recognize the impact of sugar on the teeth responding to the picture probe used. However, as we were moving to more complex levels of knowledge the percentages reduced dramatically. Only one-third of the sample was able to provide a complete answer, namely those microbes fed on sugar and this eventually leads to teeth decay and piercing. The rest of children gave intermediate responses indicating that they had some understanding and with the appropriate teaching intervention there could be significant improvement. In connection with the previously discussed ideas about dental caries, we think that these findings are promising for grounding the idea of cause and effect concerning oral health when designing oral health educational interventions.

Concerning the practices that *must be applied* for good oral health, they recognized in high percentages the necessity of brushing teeth and that of visiting the dentist, as well as avoiding candies. Concerning children's practices for good oral health, according to themselves, all of them indicate brushing. In contrast, the percentages for the remaining practices were low. It is worth noting that the percentages relating to children's views of the practices that *should be applied* are much higher than those relating to the practices that they apply. This can be probably attributed to the different kind of the questions used in each case (multiple choice and open question). However, it might also show that the proper knowledge does not automatically imply proper behaviour, in agreement with the findings of Smyth et al., (2007). The findings from parents' questionnaires on the same issue are slightly different: the main practice was brushing (96.7% compared to 100% of children) and additional flossing (3.3% only compared to 8.3% of children). Moreover, few parents (3.3%) responded that their children do not apply any practice at all. A possible explanation could be the tendency of children to give the desired response (Littledyke, 2004). In addition, children were probably

influenced by the previous questions of the interview. Furthermore, the sample of parents does not include the parents of all children, but only those who returned the questionnaire. However, considering the responses of parents as more reliable, we infer that there still exist children who do not care about their oral hygiene at all.

The frequency of brushing, according to most parents seemed to be once a day (55%), while less than a third claimed that their children brush their teeth at least 2 times a day as recommended. The above findings demonstrate that the frequency of brushing for a lot of children is insufficient, while the parental role during that can still be improved. Gibson and Williams (1999) suggested that regular brushing (twice a day) with fluoride toothpaste could be more effective than reductions of sugary foods intake; hence, this is a certain objective for an oral health education programme.

Regarding the frequency of sugary foods' consumption by the children, only 10% of parents replied 1 time per week, as recommended. More than half of them replied that this consumption was 2-3 times weekly, whereas, more than a third of parents responded that their children consume sweets or soft drinks daily, at least once a day. Thus, we conclude that the dietary habits of the children in this study could be improved in order to meet healthy recommendations for this age.

Finally, according to our findings concerning dental visits we conclude that children's oral health is considered important enough to be preventively controlled; however, this is not performed as frequently as recommended.

This research was a first attempt to explore the views of preschool children in our country and the findings could be used to design learning interventions related to oral health. The preschoolers were shown to have capabilities of understanding issues of oral health, so it could be possible to design and implement more dynamic educational interventions within the classroom for oral health issues. Traditionally, health behaviours of young children are developed based on rules. However, a more effective approach could be grounded on the idea of cause and effect considering children's low tendency to associate dental caries with sweets and to a lesser extent with poor oral hygiene and germs. Moreover, the recorded irregular habits towards oral health provide useful material to design learning environments that appeal not only to children but also to parents, in order to inform them and raise their awareness. However, for more secure generalizations, this study could be repeated assembling a larger sample, not only from the city of Patras but also from other areas, both urban and non-urban including children of other nationalities and different socio-cultural background.

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**Annex**  
**Questions of the interview to the children**

1. (Featured pictures: a. child holding a thermometer, b. child smiling, c. child blowing his nose).  
*What do the pictures show? Which child do you think is healthy?*
2. (Featured pictures: black and white pictures where the point in pain is indicated in red. Namely: a. person having a sore throat, b. person having toothache, c. person having stomachache)  
*What do the pictures show? If someone has a sore throat, is he healthy? If someone's teeth hurt, is he healthy? If someone's tummy hurts, is he healthy?*
3. *What is the use of teeth?*
4. *Why do we want our teeth to be healthy?*
5. (Featured pictures: a. mouthwash, b. tooth brushing, c. visit to the dentist d. eating candies, e. dental floss)  
*What do the pictures show? What should we do to have healthy teeth?*
6. *What do you do to have healthy teeth?*
7. *a. Do you know any dental disease? b. Have you ever heard the word caries? Where? What is it?*
8. (Featured picture shows: candies, microbe cartoon and tooth having a hole, indicating the effects of sugar consumption for teeth)  
*Can you describe what happened to that tooth? Can you explain why?*
9. *How do you know that a tooth got sick?*
10. (Featured picture: child and dentist)  
*Have you ever been to the dentist? How did it feel? / If your mom told you that the following day you would visit the dentist, how would you feel?*  
Choices given: a. I like / would like, b. I don't like / wouldn't like, c) I'm afraid / would be afraid, d. don't know