STUDYING THE SKILLS ATTITUDES ON FACTORS AFFECTING DENTAL HEALTH OF CHILDREN

BADANIE UMIEJĘTNOŚCI I POSTAW JAKO CZYNNIKÓW
WPŁYWAJĄCYCH NA ZDROWE ZĘBY U DZIECI

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ABSTRACT

Introduction: Nowadays, the high level of dental morbidity among children is an urgent medical problem. Healthy lifestyles and sanitary-hygienic upbringing in the family is most important components of the formation of dental health of children. But in order to be able to teach their children, parents need to be themselves knowledgeable about hygiene and prevention, have the necessary skills and desire to instill it in their children.

The aim: The aim of our study was to assess the level of awareness of schoolchildren parents about the factors affecting the dental health of their children according to the questionnaire.

Materials and methods: The article presents the results of a sociological survey in the form of anonymous polls on a specially designed questionnaire. With the help of the sociological method, 408 questionnaires, which were filled up by parents of students of general school Nº19 in Poltava, were processed and analyzed.

Results: Among the interviewed individuals, we investigated groups of predictors that could increase the parents' awareness of the factors influencing the formation of health; to teach children by parents of the rules of personal hygiene of oral cavity and skills of self-prevention of dental diseases; on factors that lead to proper orthodontic pathology. **Conclusions:** Based on the parents' answers to the factors which form the health of the population, we can conclude that their awareness on this issue is insufficient. The results of the survey show insufficient level of knowledge in the issues of the formation of health and prevention of dental diseases among the respondents. Thus, the necessity to carry out the corresponding work in educational institutions with the involvement of teachers, dental doctors, pediatricians and doctors of other specialties is determined.

KEY WORDS: sanitary-hygienic upbringing in the family, healthy lifestyle, parents' awareness

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INTRODUCTION

Important components of the formation of dental health of children are healthy lifestyles and sanitary-hygienic upbringing in the family. Specialists in hygiene of children and adolescents and pediatricians constantly pay attention to the leading role of the family in strengthening the health of children [1, 2]. It is the foundations of a healthy lifestyle are formed in the family, first of all the family is opposed to the formation of harmful habits in children and adolescents. But for being able to teach their children, parents need to be knowledgeable about hygiene and prevention, have the necessary skills and desire to instill it in their children.

THE AIM

The aim of our study was to assess the level of awareness of schoolchildren parents about the factors affecting the dental health of their children according to the questionnaire.

MATERIALS AND METHODS

The article presents the results of a sociological survey in the form of anonymous polls on a specially designed questionnaire. With the help of the sociological method, 408 questionnaires, which were filled up by parents of students of general school №19 in Poltava, were processed and analyzed.

RESULTS AND DISCUSSION

Among the respondents, we investigated groups of factors that could influence for:

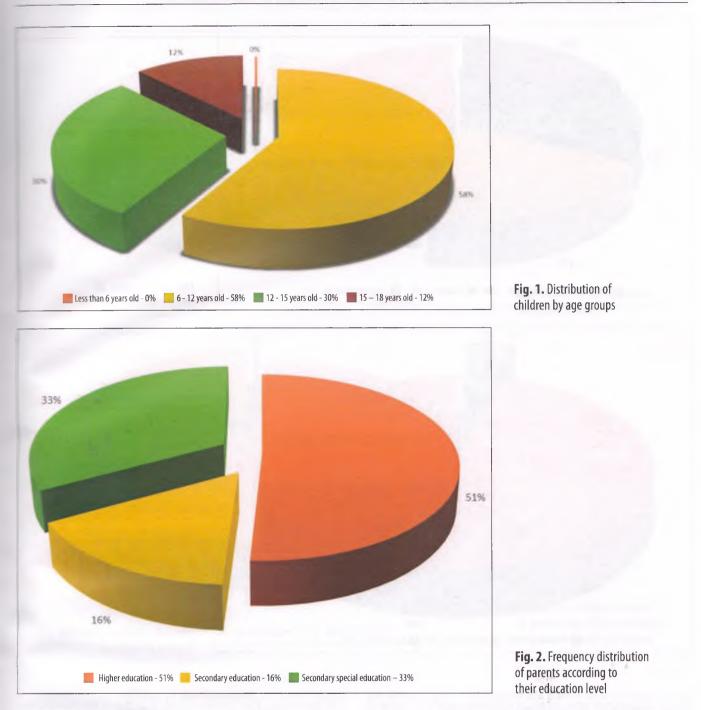
on parents' awareness of factors influencing the formation of health

 to teach the children of the rules of personal hygiene of oral cavity and skills of self-prevention of dental diseases by their parents

on factors that lead to formation of proper orthodontic pathology.

The data analysis of the questionnaire consisted of several stages.

At the initial stage, medical-demographic and socioeconomic factors were investigated. These factors included the age of parents, age (age groups) of children, level of edu-



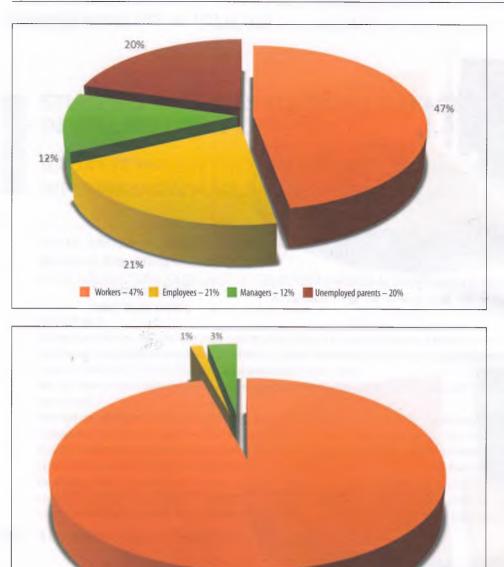
cation and the appointment of parents, place of residence, financial well-being of the family.

When determining of the middle age of parents was found that it was 37.6 ± 0.3 years. Age of children (according to age groups): less than 6 years old - 1 (0,2%), 6-12 years - 236 (58,1%), 12-15 years - 120 (29,6%), 15-18 years - 49 (12.1%) (Fig. 1).

The level of education of parents was distributed as follows: with higher education there were 206 (51,0%), secondary education - 65 (16,0%) and secondary special education - 134 (33,0%) (Fig. 2).

According to their profession, the children's parents were distributed as follows: 191 - workers (47.0%), employees - 85 (21.0%), managers - 47 (12%), unemployed parents - 83 (20.0%) (Fig. 3).

The place of residence is important to take into account the effects of various factors which affecting the health of the child. Firstly, living in the city makes specialized medical aid, which is orthodontic care, more accessible and closer to the population. Secondly, the place of residence is characterized by climatic-geographical and ecological characteristics. One of the exogenous factors is the impact of an unfavorable environmental environment (elevated or lowered fluoride content in drinking water) on both human health as a whole and individually on the formation of its organs and systems, including the formation of the tooth-jaw system. The content of fluorine in drinking water in the Poltava region ranges from 0,7 to 8,8 mg / l, and in Poltava city - 0.8-1.2 mg / l, that is, within the normal range. According to the literature, the prevalence of Iryna A. Holovanova et al.



96%

📕 Poltava city - 96% 📃 District center - 1% 📗 Rural residents - 3%

Fig. 3. Distribution of parents by profession

Fig. 4. Distribution of families by place of residence

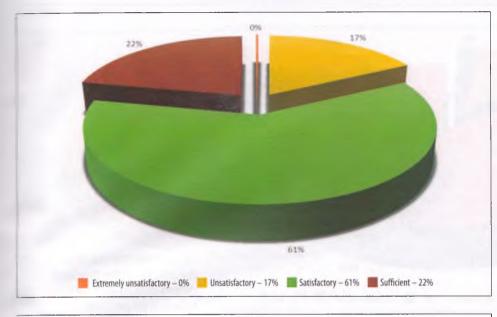
tooth-abdominal anomalies in children aged 6-7 years in the area with an optimal fluoride content is 41.6%, at 12 years of age - up to 55% [3, 4, 5, 6].

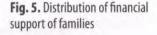
According to the place of residence, our respondents distributed as follows: 389 (95.8%) Poltava residents, 5 (1.2%) - from the district center, and 12 (2.9%) rural residents (Fig. 4).

The financial support of the family has a significant impact on the formation of the children's health. According to some authors, in the families with low-income, the proportion of children with deteriorated and poor health during the first year of life is 40.0%. In families with a standard of living above the average children with deviations in the state of health are found 4 times less often. The deterioration of the child's health is often aggravated by unsatisfactory living conditions caused by a lack of financial resources. The low standard of living of the family, the lack of a family budget and the unsatisfactory social and psychological background associated with it create unfavorable conditions for the formation of a psychologically and physically healthy child [7].

The financial support of the family was assessed as "extremely unsatisfactory" - 1 (0.2%), "unsatisfactory" - 70 (17.2%), "satisfactory" - 247 (60.8%), "sufficient" - 88 (21.7%) (Fig. 5), that is, 17.4% of respondents can be classified as low-income families.

The next step was to examine the aspects that have a significant impact on the formation of dental health of children: observance of personal hygiene of the oral cavity by parents and teaching for children of its basics, self-esteem by parents of their sanitary-hygienic awareness, parents' assessment of the state of children's oral cavity.





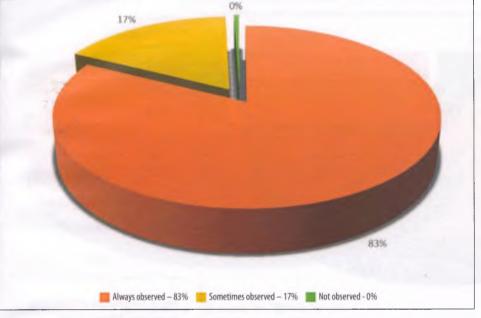


Fig. 6. Distribution of answers of parents regarding compliance with their rules of oral hygiene

Important components of the formation of dental health of children are healthy lifestyles and sanitary-hygienic upbringing in the family. Pediatricians and specialists in hygiene of children and adolescents constantly pay attention to the leading role of the family in strengthening the health of children. The basics of a healthy lifestyle are laid in the family, and above all the family is opposed to the formation of harmful habits in children and adolescents. The family affects the harmony of the child's development and laying the foundations of mental, emotional, intellectual, personal and social components of health. The family is the main participant and the direct executor of work on the upbringing of the child, on the prevention of him many kinds of diseases. It depends on the formation of many hygienic and behavioral habits that often affect the health of the family [8].

Parents need to constantly monitor the state of their children's oral cavity, and parents by their personal exam-

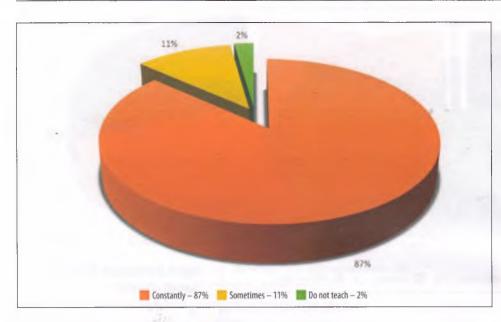
ple should teach children of the basics of oral hygiene and of basic methods of preventing dental diseases. Correct sanitary-hygienic education in the family is possible only if the parents have the necessary knowledge and skills.

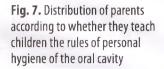
Among respondents, the rules of oral hygiene are always observed - 335 (82,5%), sometimes - 69 (17,0%), only 2 (0,5%) are not observed. (Fig. 6).

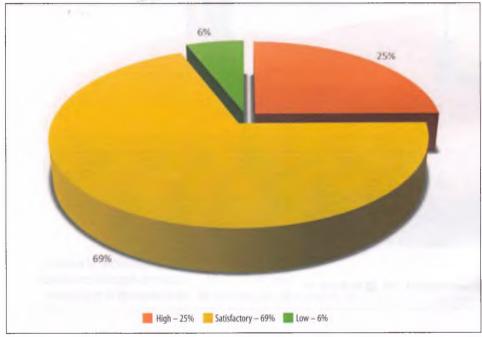
According to the results of survey, parents teach the rules of personal hygiene of the mouth of their children constantly 352 (86.7%), sometimes - 45 (11.1%), do not teach - 9 (2.2%) (Fig. 7).

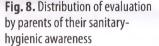
The answers to the question "How do you assess your sanitary-and-hygienic awareness?" were as follows: 101 (24.9%) rated it as high, 281 (69.2%) - satisfactory and 24 (5.9%) as low (Fig. 8).

The next step in our study was to assess parents' awareness of the dental health of their children.









The answers of parents to the question "How do you assess the condition of your baby's cavity?" were distributed as follows: "excellent" 47 (11.6%), "satisfactory" - 311 (76.6%), "bad" - 41 (10, 1%), "very bad" - 7 (1.7%) (Fig. 9). At the same time, respondents noted caries in their children in 225 (55.4%) cases; permanent teeth removed through the caries in 60 (14.8%).

According to literature, parents often inadequately assess the health of their children [9, 10].

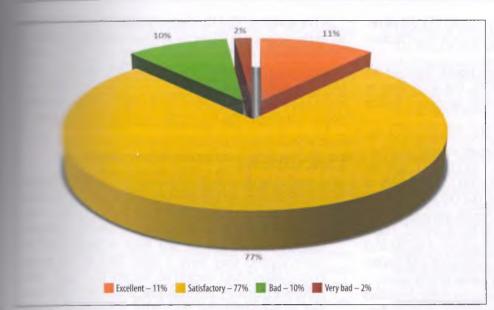
The parents' survey data are somewhat discrepancy with the data of the preventive examination by the dentist, according to which the prevalence of caries and orthodontic pathology among the examined children is 60-80% and 45.1-58.2%, respectively. A comparison of parents' assessment of their children's oral cavity with the data of a preventive examination indicates a mismatch of parents' opinion of the real level of dental health of their children. Obviously, the parents pay insufficient attention to controlling this important issue and underestimate the role of oral health in the child's body as a whole.

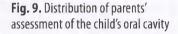
The next step of our study was to study the parent's opinion about the factors that make up the dental health. During the survey, we were asked parents to choose the three most important, in their opinion, factors that influence the formation of children's health.

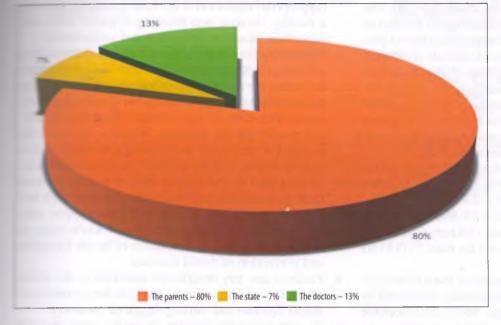
One of the most important factors influencing the formation of human health is the way of life (48-51%). This point of view is shared by 92.1% of respondents, 7.9% believe it is not important.

According to parent's answers, among the factors influencing health, a significant role is given to heredity (51.5%

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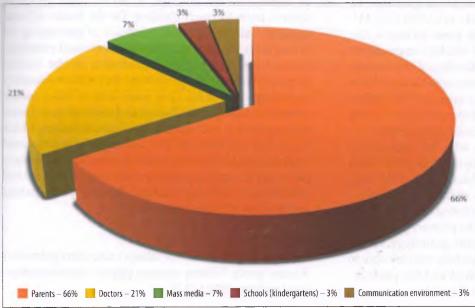


Fig. 10. Distribution of parents' opinions about the responsibility for the health of their children

Fig. 11. Distribution of parent's opinion about a person who may influence the development of prevention skills.

of respondents) and ecology (environment) (51.0% of respondents). Scientists give to the influence of these factors a less significant role (20-22%).

Research data suggest that human health depends on the healthcare system only by 8-10%, but according to the survey, 36.3% of parents' attribute significant health forming effects to the health sector

Among the factors influencing the formation of the health of the population, it is important to receive information in educational institutions - 45 (11,1%), and the corresponding education and formation in the family of the skills of a healthy lifestyle - only 164 (40,4%).

In the aspect of forming a family health, parents' assessment of the importance of health for life is crucial. However, their views on the causal relationships of health and the factors affecting it are not always consistent with reality, indicating that parents are not well aware of this issue.

The authors of numerous studies note the stable dynamics of increasing of the prevalence of pathology of solid dental tissues and dental ankles with the child's age [28]. The high prevalence and intensity of stomatological diseases in childhood indicates the need to strengthen the role of preventive work in the work of dental professionals of different specialties, and includes the prevention of dental diseases among the most urgent issues of modern medicine [3,15,19]. Thus, the basic methods for preventing or reducing dental morbidity are methods and measures of primary prevention [4,8]. So the next step in our study was to study the parents' opinion about the prevention of dental diseases.

The respondents who believed that preventive measures affect the health of the oral cavity is 355 (87.4%) peoples, believe that they do not affect - 51 (12.6%).

According to parent's opinion, 324 (79.8%) respondents think, that about the health of their children should care their parents, 29 (7.1%) – should care the state, 53 (13.1%) – the doctors (Fig. 10).

According to our respondents' answers, most of the children in the development of prevention skills are affected by parents - 268 (66%), by the doctors - 86 (21.2%), from the mass media - 29 (7.1%), at the schools (kindergartens) - 11 (2.7%), communication environment - 12 (3.0%) (Fig. 11).

However, among the factors that most influence the formation of child health, only 164 (40.4%) respondents believe, that proper education in the family and the implantation of a healthy lifestyle, so, in many cases respondents do not identify and do not logically associate the notion of influence on the child in the development of prevention skills and influence on the formation of child health.

In addition, dental practitioners, who are assigned 86 (21.2%) participants in the development of prevention skills, have the opportunity to influence the child only when they receive an appointment, which is quite rare.

We think, that the sanitary-educational work and informing parents and children about the primary prevention of dental diseases, including orthodontic pathology, should be carried out to a large extent by doctors who are able to communicate frequently with the child and her parents pediatricians and family physicians [11, 12]. To the question "Did the district pediatrician inform you about the necessity to follow the preventive measures of dental diseases and sanitary-hygienic measures?" 87 (21.37%) respondents give answer "Yes", answer "Episodically" - 186 (45.07%) respondents, "Never "-134 (32.92%) peoples, so, about a third of respondents did not receive advice from the pediatrician regarding the dental health of their children.

CONCLUSIONS

After analyzing the answers of parents of schoolchildren to the questionnaire, we can draw the following conclusions:

- 1. Based on the parents' answers to the factors that shape the health of the population, it can be concluded that their awareness on this issue is inadequate; in some aspects they have a false idea of the issue, giving significant weight to factors that have little influence (heredity, environment, health care activities) and underestimating the really influential factors (appropriate education in the family, aimed at creating a healthy lifestyle and teaching hygienic skills and education, education in educational institutions).
- 2. Comparing the results of the preventive examinations performed by the dentist and the data of the questionnaire according the status of the children's oral cavity, it can be concluded that the parents do not always adequately assess the state of their children's dental health, not perceiving the presence of caries and even the removal of permanent teeth through the caries and its complications, as signs of a bad state of the oral cavity.
- 3. Despite the fact that almost 96% of parents assessed their sanitary and hygienic awareness as high and satisfactory, the survey results do not support such a statement, showing insufficient knowledge of respondents regarding the factors of health formation and prevention of dental diseases.
- 4. Pediatricians pay insufficient attention to the issues of sanitary and educational work on the prevention of dental diseases and sanitary-hygienic measures.
- 5. To summarize the findings, it can be noted that it is parents must to teach children for the basics of oral hygiene and for the basic methods of preventing of dental diseases, especially by their personal example. Correct sanitary-hygienic education in the family is possible only if the parents have the necessary knowledge and skills. The main way to raise public awareness about health factors and methods and means of prevention is medical and hygienic education, which is carried out through the sanitary and educational work among children and their parents. It is extremely necessary to carry out appropriate work in educational institutions involving teachers, dentists, pediatricians and doctors of other specialties.

REFERENCES

 Gadzhiyev R.S., Ramazanov R.S. Usloviya i obraz zhizni podrostkava krupnom gorode. Problemy sotsialnoy gigiyeny. zdravookhranenya istorii meditsiny. 2004; 5:18-20

- 2. Campbell J.R., Mc Connochie K.M., Weitzman M. Lead Screening Among High-Risk Urban Children. Arch. Pediatr. Adolesc Med. 1994. 148 (7):688 -693.
- Denga O. V.. Mirchuk B. N.. Dychko E. N. i dr. Vliyaniye ekologicheskikh faktorov na rasprostranennost zubochelyustnykh anomaliy i ikh korrelyatsiya s zabolevaniyami tkaney parodonta u shkolnikov g. Dnepropetrovska. Visnik stomatologii. 2004; 3: 72–75.
- Sheshukova O.V., Trufanova V.P. Pokaznyky stomatolohichnoho zdorovia ditei u rehioni z vysokym umistom ftoru v pytnii vodi. Ukrainskyi stomatolohichnyi almanakh. 2005; 5: 42 – 44.
- Belikova I.V. Katrushov A.V.. Radchenko N.R.The information-analytical provision of the analysis of the indicators of morbidity among children's population of Ukraine. Wiadomosci Lekarskie. 2017; 70 (2 pt 2): 348-351.
- 6. Smahlyuk LV, Karasyunok AYE, Trofymenko MV. Porivnyal'na kharakterystyka morfo-funktsional'noho stanu zuboshchelepnoyi dilyanky u patsiyentiv v period rann'oho ta pizn'oho zminnoho prykusu [Comparative characteristic of the morpho-functional state of the dento-jaw area in patients during the period of early and late mixed dentition]. Visnyk problem biolohiyi i medytsyny. 2016; 2(128):267–270.

- 7. Cherenko L.M. Bidnist ta nerivni mozhlyvosti ditei v Ukraini. V: Poliakova S.V., Reut A.H. ta in. [za red. E.M.Libanovoi]. Kyiv: Instytut demohrafii ta sotsialnykh doslidzhen NAN Ukrainy, Dytiachyi fond OON (IuNISEF), Ukrainskyi tsentr sotsialnykh reform, 2009. 288 s.
- Diachenko Yu. L. Do problemy sotsialnoho blahopoluchchia rodyny yak nevidiemnoi skladovoi yakosti zhyttia ditei doshkilnoho ta molodshoho shkilnoho viku. Pedahohichni nauky: teoriia, istoriia, innovatsiini tekhnolohii. 2015; 6 (50): 48-53.
- 9. Rudavina T. I.. Averianova N. I.. Guseva S. V. i dr. Rol semi v formirovanii zdorovia shkolnikov. Sbornik materialov XVI syezda pediatrov Rossii «Aktualnyye problemy pediatrii». Moskva. 2009: 333–334.
- Markova A. I., Lyakhovich A. V., Gutman M. R. Obraz zhizni roditeley kak determinanta zdorovia detey. Gigiyena i sanitariya. 2012; 2: 55-61.
- Natalia A. Lyakhova, Svetlana S. Kasinets. The preexposure prophylaxis of stomatological diseases among the population of ukraine in the practice of the family doctor and the pediatrician. Wiadomości Lekarskie. 2017; LXX. 3 (I): 470–473.
- Liakhova N.O., Filatova V.L., Holovanova I.A. Profilaktyka stomatolohichnykh zakhvoriuvan sered dytiachoho ta dorosloho naselennia Ukrainy v praktytsi simeinoho likaria. Ukraina. Zdorovia natsii. 2016; 1-2 (37-38): 132-136.

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