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**PROFESSIONAL PRODUCTS FOR THE CORRECTION OF TOOTH
HYPERSENSITIVITY, WHICH ARE PRESENTED ON THE MARKET OF THE
REPUBLIC OF BELARUS**

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Resume. *The assortment of professional products for the correction of dentin hypersensitivity was analyzed and 33 names (items) of the drugs were identified. The most wide-spread group was remineralizers – 21 items (63.6% of the assortment). 96 dentists were interviewed and the remineralizers were identified also as the most popular and commonly used drugs under study - 100.0% respondents know and use them. The least popular remedies were the drugs based on potassium oxalate and arginine.*

Keywords: *dentin hypersensitivity, correction, professional products.*

Introduction. Hypersensitivity of teeth (dentin hypersensitivity in accordance with ICD-10) may be defined as short, sharp pain arising from exposed dentine in response to stimuli, typically thermal, evaporative, tactile, osmotic or chemical and which cannot be ascribed to any other the most popular and commonly used drugs or dental defect or pathology (M. Addy., 2014).

Over last decades the hypersensitivity of teeth in the world has increased by 35 - 42% and reached 68-74% (Irwin CR, McCusker P., 1997; Swift EJ, 2004; Cummins D., 2009; Fedorov Yu.A. et al., 2012). In the Republic of Belarus from 9.1 to 67.3% of the population face this problem in different age groups (Dedova L.N., Solomevich A.S., 2006) [1, 2, 4].

Dentin hypersensitivity can be a challenging condition for patients to describe and for dental professionals to accurately diagnose and treat.

The main ways of the correction of tooth hypersensitivity are: the decrease of the excitability of the neural-receptor apparatus of the pulp and the decrease of the permeability of hard tissues of teeth (by enamel and dentine mineralization or by blocking the entrances to the dentinal tubules) [1, 2, 3, 4].

Knowing the assortment of professional products for the correction of tooth hypersensitivity and the mechanisms of their action enables the dentist to select the optimal scheme for eliminating this pathology for each particular patient.

Aim: to analyze the assortment of professional products for the correction of dentin hypersensitivity, which are presented on the dental market of the Republic of Belarus and knowledge of dentists about them.

Objectives:

1. To analyze the assortment of professional products for the correction of dentin hypersensitivity, which are presented on the dental market of the Republic of Belarus.
2. To analyze the knowledge of Belarusian dentists about professional products for the correction of dentin hypersensitivity, which are presented on the dental market of the Republic of Belarus.

Materials and methods. The assortment of the following organizations selling dentistry goods in the Republic of Belarus was studied: PE "VMK-Dent", LLC "Medistom", PUE "Unico-Dental", JV "Dina-International" LLC, CJSC

"Belmedpostavka", group of companies "Belomnimed", LLC "Medical House", CPUE "UBITI", UE "Stomalux". The analysis was done in February 2018.

96 dentists of various specialties (therapists, pediatrics, orthodontists, orthopedists) were interviewed to analyze their knowledge of the professional products for the correction of dentin hypersensitivity which were identified as a result of the first part of the study. A special questionnaire was prepared by us for the survey and the quiz was done in March and April 2018.

Results and discussion. As a result of the first part of the study 33 names (items) of the professional products for the correction of tooth hypersensitivity were identified. Analysis of the structure of the assortment of these remedies showed that they were presented by: fluoride liquids – 1 item (3.0%), medicines for deep fluorination - 2 items (6.1%), fluorine foams - 1 item (3.0%), mineralization varnishes - 12 items (36.4%), fluorine gels - 5 items (15.2%), gels and liquids based on potassium oxalate - 4 items (12.1%), arginine based medications - 2 items (6.1%), blockers of dentinal tubules - 6 items (18.2%).

The analysis of the results of the questionnaire showed that the dentists were better informed about remineralizing remedies - all of the doctors know about these or other drugs from this group and apply them in their practice.

The most popular drugs from this group were: Bifluorid (Voco GmbH, Germany) Multifluorid (Voco GmbH, Germany) Belak F (VladMiVa, Russia), Belak F transparent (VladMiVa, RF), Fluocal Gel (Septodont, France) –fig.1.

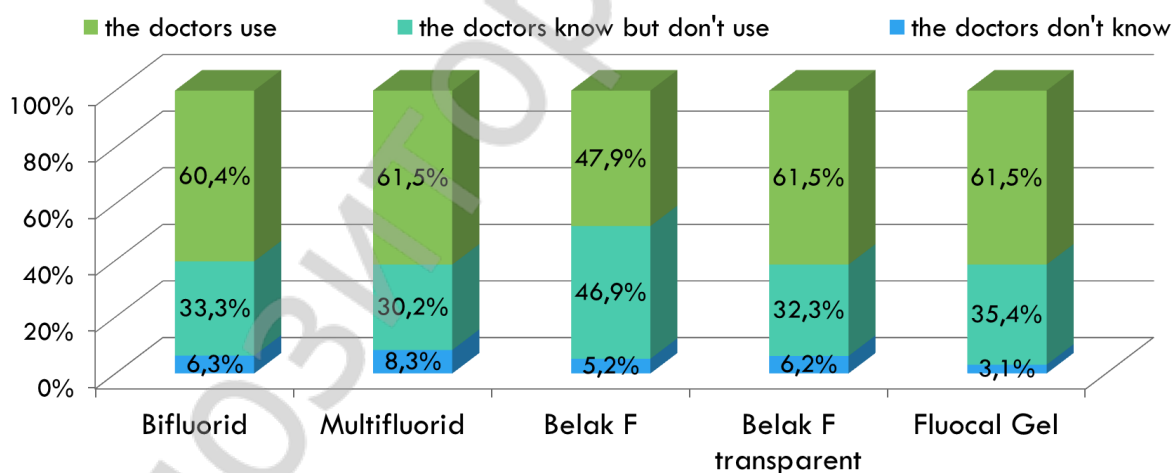


Figure 1 – The most popular remineralizing drugs

Large part of the dentists did not know any drugs based on potassium oxalate and arginine, available for sale at the time of the study - 50.0% (48 people) and 47.9% (46 people) respectively (fig. 1).

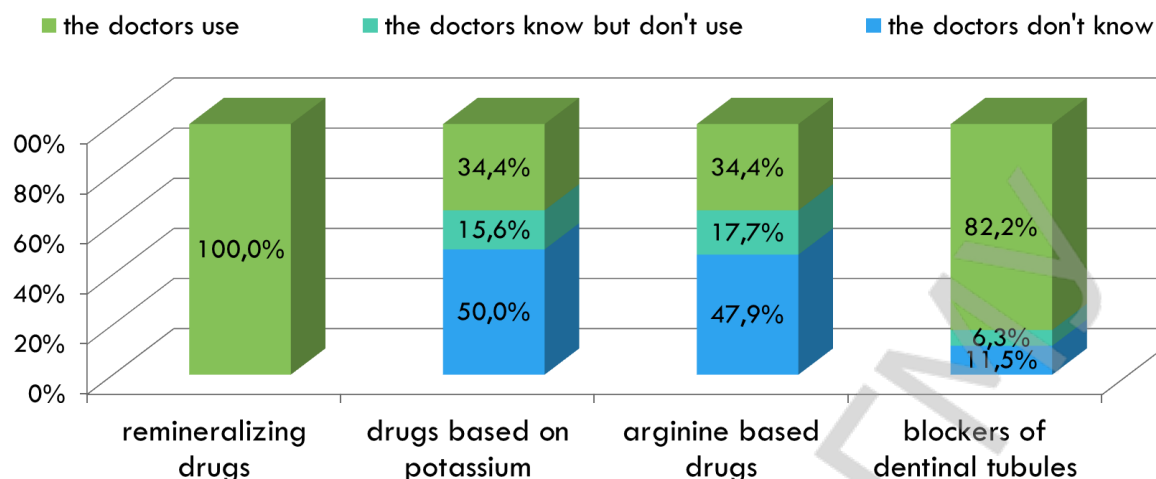


Figure 2 – The most popular groups of the drugs

From the drugs not included in the quiz, but used to correct dentin hypersensitivity, dentists most often indicated different adhesive systems - 8.3% (8 people).

Conclusions:

1 The assortment of the products under study and their mechanism of action allow to cover all the ways of the correction of dentin hypersensitivity.

2 The most widely represented group of the products is preparations for mineralization of enamel and dentine.

3 These products are also the most popular drugs for the correction of dentin hypersensitivity.

3 The knowledge of practicing dentists about the means for correcting dentin hypersensitivity can be assessed as insufficient.

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