

## THE INFORMATION CONSULTATIVE TECHNOLOGIES USE IN DENTISTRY AND MAXILLOFACIAL SURGERY.

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*The Abstract.* The possibilities of the electronic technologies using in the dentistry, and the sociological survey opinions results of the doctors – dentists, concerning the opportunities to be used of the information consultative technologies in the dentistry have been presented in this paper.

Thus, in the recent years, the telecommunication technologies' using in the public health has already been opened up, principally, the new possibilities for the challenges' solving of the clinical, educational, organizational, and managerial nature [1, 2].

So, the existing situation in the dentistry is characterized by the dentists' and dental practitioners' deficiency in the municipal rural regions, the high level staff turnover, the insufficient their qualifications, that is determined the development urgency of the management solutions, on the basis of the information and computer technologies (ICT) using [3].

So, the medical workers' insufficient qualifications and the health workers' inadequate training is, practically, resulted in the considerable proportion of the errors in the teeth and the mouth diagnostics and diseases' treatment, which, **in its turn**, is indicated on the use expanding feasibility of the telemedicine technologies in the dentistry.

Thus, the remote diagnostics, the tele-consultancy, the distance education, as well the medical help management, as the health care organization are the main directions of the information and telecommunication technologies using, from the world and Russian telemedicine experience. So, the prophylaxis is the significant branch of the working in the dentistry, which can be actively used by the Internet – medicine. Finally, the basic electronic technologies in the dentistry are the following: E – Mail, WEB – service, as well as videoconferencing (Table **No.1**).

**The Table No.1.**

**The Electronic Technologies Using in the Dentistry and Maxillofacial Surgery.**

<b>Technologies</b>	Medical help	Education	Prophylaxis	Management and organization
<b>Electronic mail</b>	Delayed tele-consultations	Educational and methodological materials delivery	Prophylactic materials delivery	Official documents delivery, data collection
<b>WEB - service</b>	Information placing on clinical cases	Electronic textbooks, electronic libraries	Information prophylactic resources, forums for population	Orders, programs on websites placement

<b>Video-conferencing</b>	Tele-consultations, intra-surgical monitoring	Video lectures, seminars, demonstration operations	Interactive communication between physicians and patients	Vide Conferencing on dental assistance
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The ICT can be efficiently used for the remote diagnostics, tele-consultation, and it, **moreover**, can be used in the distance education of the medical staff, as well as in the dental diseases management and prophylaxis.

So, the sociological surveys, having conducted by us, have been focused the information awareness on the doctors – dental surgeons’ telemedicine challenges of the different specialities at the various levels of the dental care provision.

The doctors – dentists’ questionnaire survey has been conducted in the rural municipal regions of the Orenburg region, directly at the workplaces, and during the regional scientific and practical conferences conducting. So, the 138 questionnaires have been subjected to the statistic analysis. As a result of the already made analysis, it has been established, that the computer technique and its equipment is practically available in nearly almost in all the medical Institutions and its settings. In 57,5% of the medical Institutions and its settings of the dental profile health facilities, the doctors of which were covered by the questionnaire survey, there was the digital X – ray equipment, including the obtained one by the public health modernization program.

The 68,1% of the physicians have already indicated their ability to be worked on the computer. The 54,2% of the physicians have already used the computer data processing results in their work.

Thus, 48,2% of the doctors – dentists are used the E – Mail, 31,5% are used the Internet networking, including the search for the necessary documents for their work, and 17,3% are, practically, used the «Skype» videoconferencing program. So, the respondents have not had any practical skills to be used the telemedicine technologies, at the questionnaire survey time. The telemedicine tasks and challenges have not been familiar, at the questionnaire survey time, at 48,2% of the physicians.

The responses analysis to the questions on the telemedicine attitudes has been shown, that more than two – third of the doctors – dentists are quite positively related towards the telemedicine technologies adoption and their further use (e.g. Table **No.2**).

**The Table No. 2.**

**The Doctors – Dentists’ Questionnaire Survey Results on the Using Challenges of the Informational and Tele-Communication Technologies (e.g. in %).**

<u>No</u>	<u>Question:</u>	<u>yes</u>	<u>no</u>	<u>insignifi- cantly</u>	<u>Idon’t know</u>	<u>total</u>
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1.	<u>Do we need, in principle, the E-Public Health Technologies?</u>	<u>69,3</u>	<u>6,3</u>	<u>13,0</u>	<u>11,4</u>	<u>100,0</u>
2.	Is there a need for the telemedicine consultations on the dentistry and maxillofacial surgery?	59,6	21,9	10,9	7,6	100,0
3.	Is it necessary the distant education in the dentistry?	78,5	8,3	11,7	1,5	100,0
4.	Do we need the information technologies to be used in the management?	51,5	12,3	16,2	20,0	100,0
5.	Do you think it is necessary to be placed the prophylactic resources on the dentistry for the population in the Internet?	61,8	18,6	12,7	7,9	100,0

Thus, the doctors – dentists’ questionnaire survey has already been found the preference of the tele-educational technologies using over the tele-consultations needs, that, it may be explained by the relative information scarcity for the doctors – dentists, having worked in the municipal clinics. So, all these peculiarities and specific features have already been taken into account at the information activities planning on the telemedicine among the doctors – dentists in the Orenburg region (e.g. the Russian Federation).

#### The References:

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