

REGULATION OF A DENTIST'S WORK IN TERMS OF OPERATION WITH DENTAL ASSISTANT IN FOUR HANDS

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A weak link of dentistry is the lack nurses, their special knowledge and skills. It leads to an irrational use if a dentist's labour. A need for a special training of specialists with secondary medical education, including «dental assistant» arises (V.V. Sadovskiy, V.I. Starodubov, A.A. Kalinskaya, and others, 2006).

As an experiment, we have approbated an organization-functional model of a doctor's work and a dental assistant that includes: work algorithm, set-

ting realized volumes and labour costs of the dentist and his dental assistant in four hands, normalization of work of these specialists.

During the research we have taken work normalization of a dental therapist and dental assistant in four hands according to the recommendations of Scientific-research center of N.A. Semashko (V.M. Shipova and others, 1987).

Chronometric estimations of work time costs of the dentist and dental assistant have been analyzed by separate work operations that were differentiated depending on a diagnosis, number of tooth roots, number of visits, and also types of activity of the dentist and his dental assistant in terms of work with four hands.

Table 1 provides the structure of work time costs of the dentist and dental assistant in terms of work with four hands.

Table 1

Structure of time costs of the dentist and his dental assistant (% of the total)

Types of activity	Dental therapist		Dental assistant	
	minutes	%	minutes	%
Basic activity	6685	84,4	8450	91,5
Auxiliary activity	252	3,2	168	1,8
Documental work	508	6,4	330	3,6
Work talks	16	0,2	84	0,9
Personal time	213	2,7	164	1,8
Idle time (waiting for a patient)	246	3,1	44	0,4
Total	7920	100,0	9240	100,0

Research materials testify for a relative load of the doctor and his dental assistant with treatment-diagnostic work of 84,4 and 91,5% of the time.

We should outline that time costs of the doctor and dental assistant for work with medical documents are small, and it is linked to the fact that passport part of a patient's medical card was filled by registry of the clinic Tooth formula in the medical card of a patient, the list of everyday work of the dentist was filled by the dental assistant. The doctor only filled the fields of medical card that relate to the diagnostic and treatment of a patient.

Average time costs of dental assistant per a visit, considering coefficient of repeat, equaled 46,4 minutes (Table 2). Time costs of the dentist and dental assistant in terms of work with four hands are provided in Table 3.

The received average time costs of the dentist and his dental assistant per a visit were taken as a basis to define a volume of specialists' work load during a day. According to labour law (resolution of the Government № 101 of 14.02.2003 «On the duration of work time of medical work-

ers depending on the occupied position») the week norm of work time of a dentist equals 33 hours or 6 hours 36 minutes a day (396 minutes), dental assistant – 38,5 hours or 7 hours, 42 minutes a day (462 minutes).

While projecting norms for a dentist we consider the so-called coefficient of work time usage for the direct treatment-diagnostic activity that equals 0,923 (the order of Federal fund of obligatory medical insurance of RF № 72 of 12.10.1995 «On methodic recommendations while calculating tariffs for ambulatory-polyclinic treatment»).

Everyday load of a dentist who works with four hands equals:

$$\frac{396 \text{ min} \cdot 0,923}{51,9 \text{ min}} = 7,04.$$

While working with four hands an average planned number of visits for dental therapist and dental assistant can equal 7.

Resume. The article presents some results of normalization of labour and calculation of work load in terms of work with dental assistant with four hands.

Table 2

Time costs of dental assistant per a visit (considering coefficient of repeat)

Type of work operation	Average time per an element (min)	Coefficient of repeat	Average evaluated time (min)
I. Preparing materials for work operation and independent work			25,61
– anaesthesia, including premedication	5,8	0,52	3,0
– preparing endodontic instruments	7,5	0,73	5,45
– preparing treatment laying	3,0	0,2	0,6
– preparing isolation laying	2,8	0,5	1,4
– preparing paste to fill a channel	6,2	0,43	2,6
– preparing pins to fill channels	3,7	0,38	1,4
– preparing anchoring pins	2,75	0,06	0,16
– preparing chemical composite	2,1	0,2	0,4
– preparing photopolymer	1,5	0,38	0,57
– preparing matrix	1,3	0,22	0,28
– preparing grinding system	2,6	0,7	1,8
– preparing polishing system	1,9	0,7	1,3
– color definition	0,9	0,6	0,54
Hygienic preparation of tooth for treatment	3,0	0,85	2,55
Radiography of teeth and oral cavity	5,0	0,4	2,0
Fixing temporary filing	3,0	0,02	0,06
Placing temporary protective band, medication treatment of paradontal recesses	12,5	0,04	0,5
– taking physiotherapy procedures	10,0	0,10	1,0
II. Joint work with dentist			20,79
– talking to a patient (questioning, advice, prescription)	2,44	1,0	2,44
– isolation from moisture	3,2	1,0	3,2
– drying	4,5	1,0	4,5
– helping to fill with chemical composite	10,9	0,32	3,45
– helping to fill with photopolymer, light-striking	18,0	0,4	7,2
Total			46,4

Table 3

Time cost of the dentist and his dental assistant per a visit in terms of work with four hands

Type of work operation	Average time costs of the dentist (min)	Average time costs of dental assistant (min)
1	2	3
Functional inspection of oral cavity	1,3	–
Talking to a patient (questioning, advice, prescription)	5,1	2,44
Anaesthesia and waiting	preparation	3,0
	implementation	–
Hygienic preparation of tooth for treatment	–	2,55
Isolation from moisture, cleaning from raid	1,5	3,2
Formation of cavity, opening tooth cavity	Preparing ondodontic instruments	5,45
	Formation of cavity	–
Amputation, extirpation	1,7	–
Treating root channel	4,3	–
Defining channel length	1,0	–
Medication processing of the cavity	0,6	–
Drying	1,2	4,5

End of Table 3

1		2	3
Filling channels with paste, using pins	Preparing paste	–	2,6
	filling	3,4	–
	Preparing pins	–	1,56
	Placing pins	2,0	–
Radiographic control		1,1	2,0
Defining color		0,32	0,54
Placing matrix	preparing	–	0,28
	placing	0,7	–
Placing treatment laying	preparing	–	0,6
	placing	0,43	–
Placing isolation laying	preparing	–	1,4
	placing	1,7	–
Filling	Preparing photopolymer, chemical composite	–	0,97
	Chemical composite	3,3	3,45
	Photopolymer	4,8	7,2
Etching solid tooth tissue		0,8	–
Placing adhesive system		0,5	–
Grinding	preparing grinding system	–	1,8
	grinding	3,3	–
Polishing	preparing polishing system	–	1,3
	polishing	2,8	–
Placing temporary filling		–	0,06
Placing temporary protective band, medication treatment of paradontal recesses		–	0,5
Taking physiotherapy procedures		–	1,0
Total		51,9	46,4

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IMPROVEMENT OF FORMS AND METHODS OF THE FINANCIAL STIMULATION

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The analysis of the special features of the development of Russian economy testifies about necessity of the rational participation of state in

the economy with the market self-regulation. Of all possible versions of the guarantee of this combination with the assigned purposes and the resource limitations most acceptable is the model of strategy of the financial regulation of the social sphere, as basis of which comes out state-private partnership.

The formation of developed market relations on the innovation basis in the social sphere is to a considerable degree connected with the solution of the problem of effective financial regulation in the aspect of agreement and realization of the interests of its subjects, since the prevailing system of administrative relations, until now, to the insufficient degree considered promising economic interests and need for their realization, which entailed incomplete calculation and realization of the stimulating potential of strategy of financial regulation in the social aspect as the important tool of economic development in the present stage.

Systems approach makes it possible to design the integral system of the formation of the priorities of financial regulation in the social sphere, the totality of forms and methods, capable of ensuring dynamic qualitative economic increase, restructuring of the economy on the contemporary scientifically-