Data on authors:

Rumjantseva Anna Ivanovna: The leading expert of Regional branch of Fund of social insurance of the Russian Federation on RS (Ya). 677000 Yakutsk, street October 15. Ph. 42-85-71. An E-mail: a.rumyantseva@yandex.ru.

Timofeev Leonid Fedorovich: Deputy director FSSI Health institute, the professor IPTD NEFU of M.K. Ammosov, d.m.s. 677010 Yakutsk, Sergeljahsky highway, 4, case S-2. Ph. 36-15-36. An E-mail: TLFnauka@mail.ru.

Grigorieva V. K., Varfolomeyeva G. D.

Protection of the rights of citizens and non-departmental control over quality of medical aid in OAO GSMK "Sakhamedstrakh" for 2007-2009

Ключевые слова: экспертиза, качество медицинской помощи, страхование граждан.
Keywords: examination, quality of medical aid, insurance of citizens.

A.N. Grigorieva, N.V. Savvina, G.I. Grigoriev

Effectiveness of supplementary prophylactic medical examination and recovery measures among municipal medical workers of Yakutsk city

Indicators of general, primary disease and temporary disability of medical workers of Yakutsk are noted to be higher as compared with those indicators of the whole population of the Republic Sakha (Y), Yakutsk city as well as of Russia, and even of medical workers of Russia as a whole. The clinical picture of medical workers of Yakutsk city strategically does not differ from the all-Russian one. The conducted supplementary prophylactic medical examination and recovery measures for municipal medical workers of Yakutsk have caused the reduction in indicators.

Keywords: medical workers, supplementary prophylactic medical examination, disease, recovery measures, temporary disability.

Introduction. Conditions and type of work of public health workers should be paid steadfast attention, taking into account the influence of various adverse factors of industrial

environment on their health (biological and chemical substances, ionizing and laser radiation, ultrasonic effect, compelled labour position, voltage of analyzers and others).

Medical workers work in conditions of high emotional stress that result in rapid nervous breakdown, development of a syndrome of "professional emaciation».

The salary of public health workers in the Russian Federation is much lower than of industrial workers' that does not correspond to educational level and high public importance of their activity. [1, 5]. Alongside, the most part of doctors and staff nurses consider that can make nothing for improvement of their health [2].

Such complex of adverse factors of industrial environment, inadequate performance of obligations on labour protection, lack of medical aid service lead to the growth of general and professional disease of public health workers (G.M.Vjalkova, 2002; O.N.Taenkova, 2002). Besides, till now for prophylactic medical examination of medical workers there is no uniform information database, there is no system approach and continuity in actions at all stages dispensary supervision, the amount of prophylactic activities is rather limited, and prophylactic medical examination has formal character, there is no control system of risk factors [3].

Scientifically well-founded approach is necessary for decision-making on preservation and strengthening of health of medical workers on the basis of the complex socially-hygienic analysis of the factors influencing the quality of life and state of health according to conditions of life's work in a residential area.

In treatment-and-prophylactic establishments of the City district "City of Yakutsk" there are 2480 medical employees, including 996 doctors (40,16 %) and the rest of them are average medical personnel 1484 (59,84 %). The amount of the served population exceeds 254 000 persons.

The ratio «doctor vs average medical personnel» is 1:1,49. This result is considered to be adverse. According to the authors, appropriate medical support of the population would be possible, in case if the given ratio is nearer to 1:2 (Hodakova O. V, 2005; Steshenko G. V, 2002). For comparison the given ratio in Russia is 1:2,7, in Moscow being 1:3,5.

Based on the literary data in Russia the frequency of general diseases at medical workers has been increased for the last ten years [2, 3, 6]. The first stage of implementing the supplementary prophylactic medical examination has allowed to reveal unfortunate trends in state of health of the medical workers, living and working in the Far North in Yakutsk city. By

2006 1722 (69,29%) persons from 2480 medical workers had been registered in "D" list. The overwhelming majority of medical employees due to the prophylactic medical examination have been referred to III group of health (60 %) and 55 % of medical workers had chronic diseases. The general disease has been noted in 2311 of 1000, exceeding that over the population of Yakutsk city (1778 per 1000) on 23,1 % ($p < 0,05$). Primary disease has amounted 898 of 1000 personnel and has exceeded this indicator among the population (719,1 on 1000) ($p < 0,05$). Pathological disease of medical employees has been in 2048 cases of 1000 surveyed as compared with the lower indices of budgetary workers of the Republics Sakha (Yakutia) amounting 1366 of 1000 and the population of Yakutsk (1900 of 1000). However, it is comparable to results of other authors as regards the prevalence of this indicator among medical workers of the Russian Federation. The rate of diseases with time disability of medical workers were approximately twice higher than the population of Yakutsk and exceeded those in 2005 over medical workers of the Russian Federation [4].

Aim: Estimation of efficiency of the conducted supplementary prophylactic medical examination and recovery measures of municipal medical workers of Yakutsk city within the Priority National Project "Health".

Materials and methods. The method of retrospective analysis of registration forms of the Public Health Management of the Municipal formation "Yakutsk city" (№17, №131, №16, №12, №4, etc.) was used including the data of Territorial fund of obligatory medical insurance (TFOMI) as well. 300 medical workers underwent the sociological survey based on the international standardized questionnaire SF - 36. Statistical data processing was carried out by means of the standard package SPSS (version 17,0) Intergroup distinctions were estimated by means of nonparametric criteria. Basic statutory acts at carrying out of prophylactic medical examination of medical workers were: 1. Appendix № 3 to the Order № 90 on preliminary and periodic medical inspections. 2. The Order MH and SR РФ№188 on «supplementary medical surveys of budgetary workers of the population». 3. The Order MH SR of the Russian Federation № 83 on «Profound medical inspections of the workers occupying harmful and (or) dangerous production jobs».

Results: According to the data of the supplementary prophylactic medical examination conducted in treatment-and-prophylactic establishments in 2006-2009, the pathological illness of medical employees has occurred in 2048 cases of 1000 surveyed and there was a twice higher rate of budgetary workers of the Republics Sakha (Yakutia), it being comparable to results of other authors due to the prevalence of the given indicator among medical workers of the Russian Federation. Pathological diseases of doctors was at 1,2 times higher than at AMW.

Only 13,7 % of physicians have been diagnosed to be healthy and have been included in I group of health: 8 % healthy persons in group of doctors and 4 % in group of AMW. The overwhelming majority of medical employees due to the results of prophylactic medical examination have been referred to III group of health (60 %), they requiring out-patient pre-examination and treatment. Relative indices of doctors ($p < 0,05$) exceed significantly the similar results of AMW amounting 34 % and 26 %. About 55 % of municipal medical workers of Yakutsk city suffer from chronic diseases. 40 % of medical workers of Yakutsk have one chronic disease. The quantity of the doctors having one chronic disease is much higher in similar group of AMW. Two or three chronic diseases have 16,6 % of the surveyed. And the quantity of doctors is more than the number of AMW, having 2-3 diseases. Almost each 8th MW has four and more diseases (13,4 %). The amount of AMW exceeds the doctors in this group (8 vs 5,4 %).

After the prophylactic medical examinations were conducted, the medical workers were divided into groups of health and pathological diseases were detected, the second stage of the supplementary prophylactic medical examination called as "recovery stage" has been carried out. The recovery measures included all traditional arsenal of the out-patient and stationary treatment.

The recover measures having been conducted, the clinical picture has changed. The first place was given to vascular diseases amounting 18,7 %. Patients with arterial hypertension predominated in this group. The frequency rate of infectious diseases was on the second place being 10 % (there is no big dynamics as representatives of this group are with chronic hepatitis), thirdly, the illness of digestive organs of 8 % was noted. Fourthly, the illness of urethral system was detected 7,9 %. On the 5th place 7% of patients were diagnosed with endocrine systems. The ratio displacement in the structure of disease was naturally as a result of the shift of persons III, IV and V groups to I and in II groups. The defining indicators of diseases have decreased such as: 1. Primary disease decreased from 898,0 in 2005 to 801,0 in 2009. 2. The general disease decreased from 2311 in 2007 to 1943 in 2009. 3. Indicators of temporary disability of medical workers (TDMW) have decreased (Table 1).

Table 1

Sickness Rate with Temporary Disability of Medical Workers of Yakutsk

Year	Cases (absolute)	Days (absolute)	Cases on 100 working people.	Days on 100 working people
2005	3138	47944	92,2	1389
2006	2608	39090	75,8	1107
2007	2815	43144	79,7	1222
2008	2647	41475	77,1	1209
2009	2365	39133	72,5	1200
M±m	2714,6±127,96	42157,2±1635,23	79,4±3,39	1225,4±45,67

As a result of improvement the absolute values of cases TDMW have decreased from 3138 to 2365 ($p < 0,05$). In absolute values of days there was decrease from 47944 to 39133 ($p < 0,05$). In cases on 100 working people from 92,2 to 72,5. ($p < 0,05$). In days on 100 working ones there was decrease from 1389 to 1200 ($p < 0,05$).

4. Dynamics of medical workers' state in health groups (Table 2) was positive.

Table 2

The positive dynamics in health groups before and after the recovery by late 2009 and an increase in amount of people discharged from «D».

	Supplementary Medical Prophylactic Examination		Extended Medical Examination		Groups 3,4,5 after recovery in 2009	
	%	Abs	%	Abs	%	abs
Group 1	13,2	328	25	279	18,0	446
Group 2	17,3	430	26	290	24,6	610
Group 3	61,4	1523	49	548	55,4	1373
Group 4	7,7	192	0	0	2,1	51
Group 5	0,28	7	0	0	0	0
Sum	100	2480	100	1119	100	2480
“D” registered	69,29	1722	-	-	57,5	1424

6. The number of relapses has decreased from 1,8 % to 1,2 %, while relative density of the medical workers who did not have disabilities has increased from 81 % up to 86 %.

Table 3.

The comparative table of economic prejudice for
all diagnosed municipal medical workers of Yakutsk in a year (in roubles).

	2005	2006	2007	2008	2009
No stationary treatment conducted	80 932 158	67 262 928	72 601 665	68 268 777	60 995 715
Stationary treatment conducted	137 353 398	114 154 768	123 215 365	115 861 837	103 518 415

According to L.F.Timofeeva [8] in 2010 the economic prejudice from TD **(P TD)** per 1 patient (on 1 case) with stationary treatment in RS(Y) accounted for 43771 roubles. While the economic prejudice without stationary treatment was 25791 roubles. The economic prejudice was accounted by the author by means of the formula such as:

P TD=D+К+A+C, where P TD is the economic prejudice per 1 patient in average; D is the cost of non-performed production; K is the payments for sick-list per 1 person; A is the average price of out-patient treatment; C is the aveage price of hospitalisation.

According to the data obtained it was found out that recovery measures which were applied to medical workers, have led to positive economic benefit. Comparing the data of the economic prejudice for 2005 and 2010 in the case of stationary treatment the economy has been in **33 834 983** roubles reversing the index of out-patient treatment, where the economy has made **19 936 443** roubles (Table 3).

Conclusions. 1. The indicators of the general disease, primary disease, disease with temporary disability at the medical workers of Yakutsk city actually exceed the same ones of the population of Yakutsk city.

2. The conducted supplementary prophylactic medical examination and recovery measures among municipal medical workers of Yakutsk city have led to the positive result and regular economic benefit.

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Grigorieva Ajtaly Nikolaevna - the Deputy Head Doctor of Clinical and Expert Work ME YCH №4 aita-23@rambler.ru
Savvina Nadezhda Valerevna – D.M.S., the Prof., the Head of Department of Institute of Post-Diploma Education HPE NEFU,
Grigoriev Gennady Ivanovich - the Physician of Clinical Centre RH №1 NCM