

I.P.Lutskan1, N.V.Savvina1, A.D.Savvina2, D.I.Sharin3, K.N.Nazarova3, N.N.Verevkina3

FEATURES OF MEDICAL MAINTENANCE OF PUPILS CHILD - YOUTHFUL SPORTS SCHOOLS IN REPUBLIC SAKHA (YAKUTIA)

1 «North-East federal university of a name of M.K.Ammosov», Yakutsk 2 «Children's city hospital of Yakutsk-city»

3 The Republican center of physiotherapy exercises and sports medicine», Yakutsk

RESUME

Research of system of medical maintenance of pupil's child – youthful sports schools (CYSS) of a city of Yakutsk according to the Republican center of physiotherapy exercises and sports medicine is conducted. Problems of organizational character in medical maintenance of young sportsmen are revealed: a severe shortage of medical shots and insufficient it is material technical base, both in the republican center, and at child-youthful schools; absence of the medical block at sports schools; absence of continuity between the center of physiotherapy exercises both sports medicine and an out-patient-polyclinic link.

The offered system of perfection of medical maintenance of pupils child – youthful sports schools, including system of selection of children for employment by various sports at municipal level will allow to improve quality of rendering of medical aid and to lower level of disease of young sportsmen without additional financial expenses.

Keywords: young sportsmen, child – youthful sports school, a state of health.

In republic functions 57 child-youthful sports schools of system of the Ministry of Education Republic of Sakha (Yakutia) with coverage more than 30000 pupils. In child – youthful sports schools of republic it is cultivated more than 30 sports. With a view of selection of young sportsmen summer Games of pupils PC are annually spent to a national team Republic of Sakha (Yakutia) «the Olympic hopes of Yakutia» in which at all stages take part more than 45000 pupils. Games are check of a condition and a physical training and sports level of development in areas, cities and original review of a sports reserve of republic. For an exit on better level of preparation and successful performance at competitions to the purpose of preservation of a continuity of training process sports actions will annually be organized. The centralized studytraining gathering are spent to the summer period in the area of Ministry of Education RS



(Yakutia) and municipal unions of areas. Young sportsmen spend stude-training gathering in various sports camps of republic on following sports: volleyball, boxing, free-style wrestling, drafts, chess, track and field athletics, a judo.

At pupils CYSS considerable on volume and intensity of physical activity involve overloads, infringements of a harmony of development, lead to formation of a various pathology, especially in the remote period of life and activity of an individual [1, 2].

Achievement of high sports results is impossible without the well enough debugged system of preparation of the sportsman. Achievement of high sports results probably only in the event that is well debugged system of preparation of the sportsman. It represents set of methodical bases, organizational forms and conditions training - the competitive process, optimum cooperating among themselves on the basis of certain principles and providing the best degree of readiness of the sportsman to high achievements in sport [3, 5].

Research objective was the analysis of system of medical maintenance of pupils child youthful sports schools Yakutsk according to the Republican center of physiotherapy exercises and sports medicine.

Materials and methods

In municipal union there are 8 establishments of additional education of children «Child – youthful sports school» («CYSS») where it is cultivated following sports: game (volleyball, volleyball beach, table tennis, football, basketball), combat sports (free-style wrestling, boxing, a judo, thakvondo), difficult the coordination (sports gymnastics, rhythmic gymnastics, bullet shooting, shooting from onions), cyclic (track and field athletics, cross-countries), speed-power (sprint distances, powerlifting), national sports, and also drafts and chess. National - the regional component in educational activity of sports school is used in branches «stick Pulling», «Northern all-round», «the Yakut jumps», "Hapsagaj" and "Free-style wrestling" where besides classic methods traditional receptions of struggle of the Yakut people are applied.

We carry out the analysis of forms of account №1 – TO «Data on establishment of additional education of children» CYSS Yakutsk for 2010 and annual reports «the Republican center of physiotherapy exercises and sports medicine» for 2008 – 2010

Pupils of schools Yakutsk, expressed desire and the last test testings become pupils CYSS. Pupils on level of physical development and a state of health are enlisted in initial, study-training groups and groups of sports perfection. The sports school will organize work with pupils within a calendar year, study-training employment on sports are spent according to the annual curriculum calculated for 46 weeks of study-training employment. Planned teaching and educational work is conducted.



According to criteria of educational activity CYSS the curriculum has 4 stages: 1 stage – sports; 2 stage – initial preparation; 3 stage – study-training; 4 stage – sports perfection.

On the first stage (sports) the pupils of comprehensive schools having the written permission (inquiry) of the doctor-pediatrist are enlisted. The primary goal is stability of structure engaged, attendance them of training employment, positive dynamics of individual indicators of development of physical qualities and strengthening of health engaged.

On the second stage (initial preparation) pupils of the comprehensive schools are enlisted, wishing to go in for sports and having the written permission (inquiry) of the doctor-pediatrist. Here the sports-improving and educational work directed on versatile physical preparation and mastering by bases technicians of the selected sport, a choice of sports specialization and performance of control specifications for transfer on 3 stage of preparation is carried out. The primary goal is attraction of the greatest possible number of children and teenagers to the regular playing sports directed on development of the person, morally-ethical and strong-willed qualities.

The third study-training stage is formed on a competitive basis from physically healthy trained, had training necessary preparation not less than 2th years and executed reception specifications on the general physical preparation and the special physical preparation. At this stage the state of health, level of physical development of pupils, dynamics of level of readiness according to specific features of the engaged is traced; development of volumes of the training loadings provided by programs on sports; development of theoretical section of the program. The primary goal is improvement of a state of health, including physical readiness and sports results taking into account specific features and program requirements on sports; preventive maintenance of bad habits and offenses.

The stage of sports perfection assumes performance by the sportsman of volumes of the training and competitive loadings, the provided plan of preparation.

In CYSS the basic document of forward planning is working programs on the sports, confirmed Federal agency on physical training and sports of Russia and position about the child-youthful sports schools, the confirmed All-Union Central Council of Trade Unions, Ministry of education both To on physical culture and From Russia.

Each trainer-teacher in the beginning of academic year makes the developed plan-schedule of distribution of class periods for year which in details reflects sequence of studying of a program material, work maintenances during the various periods of preparation. For realization perspective, training effective control tests, competitions on the general and special physical preparation are used. On the basis of results of control tests the question on level of readiness of



the engaged is solved. One of the cores a direction of work of school is creation of conditions for formation of a healthy way of life of schoolboys.

The Republican Center of physiotherapy exercises and sports medicine «the Republican center of physiotherapy exercises and sports medicine» in which structure there are following divisions is engaged in medical maintenance of pupils CYSS «the administrative device; an organizational-methodical office; branch of sports medicine; physiotherapy exercises branch.

Activity of branch of sports medicine is regulated by following standard documents: order Ministry of health (MH) the Russian Federation №337 from 20.08. 2001 «About measures on the further development and perfection of sports medicine and physiotherapy exercises»; order MH the Russian Federation №621 from 12/30/2003 «About a complex estimation of a state of health of children»; order MH the Russian Federation №60 from 3/14/1995 «About the statement of the instruction on carrying out of routine inspections of children of preschool and school age on a basis Maine»; the order of MH Republic of Sakha (Yakutia) 5/31/2005 «About the organization of obligatory medical inspection of the persons who are engaged in physical culture and sports»; order MH the Russian Federation №613H from 2/10/2010« About the statement of an order of rendering of medical aid at carrying out of sports and sports actions ». In branch of only 10 established posts: 8 doctors and 2 nurses. Branch established posts: managing branch - 1, the therapist - 1, the pediatrist - 1, the ophthalmologist - 1, the neurologist - 1, the otolaryngologist - 1, the doctor of functional diagnostics. - 1, the traumatologist-orthopedist - 1, the senior nurse - 1, the nurse - 1, including 2 pieces of a unit are occupied with external parttime workers (the surgeon, the pediatrist). With a qualifying category of 62,5 % of doctors and 50 % of nurses. Certificates on a speciality« the Physiotherapy exercises and sports »have 80 % of doctors. The branch of sports medicine occupies 4 offices: registry, an office for anthopometrical researches, an office of the therapist and the pediatrist, an office of narrow experts, an office the doctor of functional diagnostics.

Medical control by experts «the Republican center of physiotherapy exercises and sports medicine» over young sportsmen is carried out according to the general organizationalmethodical positions of sports medicine and provides definition of a state of health, features of physical development and a constitution, functionality of everyone, engaged in physical training and sports or starting employment. The volume of medical inspection depends on specific goals and conditions of its carrying out. Gathering of the medical and sports anamnesis, definition of a condition of nervous, cardiovascular and respiratory systems are obligatory, etc. On everyone examined the medical-control card which is stored in registry is made out. On the basis of the received data the complex estimation of a state of health according to order MH the Russian



Federation №621 from 12/30/2003 and distribution of young sportsmen on health groups according to order MH the Russian Federation №60 from 3/14/1995 is taken out

On the basis of profound medical inspection the sports doctor makes examination of sports work capacity of the persons, going in for sports being guided developed MH the Russian Federation by the list of contra-indications to those or other sports. Also the purpose of carrying out of expert surveys of the persons who are engaged in physical training and sports, early revealing of diseases, an estimation of physical development and a functional condition and preparation of corresponding recommendations is.

Statistical processing of the received results was spent with use of the computer program of processing of spreadsheet Microsoft Excel.

Results and discussion

Establishments of additional education of children Yakutsk have a total area of 9853 sq.m. where 3954 children are engaged, including more than half (57 %) from them goes in for sports regularly within several years. In total 282 sports groups are organized, including 26 groups (9,2 %) function on the basis of comprehensive schools where 455 pupils (11,5 %) are engaged. A polo - the age structure going in for sports is presented as follows: children till 6 years – 111 (2,8 %), including 77 girls, from 6 till 9 years – 1094 (27,7 %), including 297 girls, from 10 till 14 years – 1904 (48,2 %), including 500 girls, from 15 till 17 years – 821 (20,8 %), including 140 girls, are more senior 18 years -24 (0,6 %), including 1 girl. As a whole, the share of girls going in for sports makes 25,7 % (1015 persons). Number of workers in the «CYSS» makes 176 persons, including the training-teaching structure is presented by 87 persons (49,4 %), studysupport personnel – 7 (4,0 %), attendants – 62 (35,2 %). On the basis of two CYSS there is a boarding school - boarding house on 65 places.

All republics CYSS, including eight CYSS Yakutsk, school of the Olympic reserve, school of the higher sports skill, sports branch of the Yakut teacher training college-1, clubs of fans of run, health group, sports clubs, sections in sport centers, and also engaged in physical culture and sports in school and preschool centers are subject to medical supervision and control.

The share of references in «the Republican center of physiotherapy exercises and sports medicine» of children till 17 years makes more half (2008-89,0 %, 2010 – 83,4 %). In dynamics for 3 years the number of references by half (- 55,5 %), including children till 17 years (- 52,0 %) was cut: children till 14 years (-55.3 %) and teenagers 15 - 17 years (-43.3 %). It is possible to explain such decrease in references two factors: 1. In 2008 have passed the International sports games «Children of Asia» that has caused increase in quantity of references in connection with constant medical – pedagogical supervision of candidates of modular republic including YAKUT MEDICAL JOURNAL ..



current medical inspections; 2. Reduction of quantity of references in 2010 is connected with shortage of financing. To execute Governmental order Republic of Sakha (Yakutia) №503 from 11/23/2009 «About the plan of optimization of expenses in the basic directions of social sphere on 2007 – 2011» and the order of Ministry of Health RS (Yakutia) №07 – 8/1 – 20 from 1/19/2010« About the statement of a limit of regular number in republican official bodies of public health services for 2010 »reduction of shots on 5,0 pieces of a unit, including 3,75 medical pieces of a unit (the table has been spent. 1)

Table 1 Quantity of all references of sportsmen depending on age (absolute number (AN)., %)

Years	Total of	till 17	years	Children and teenagers				
	references.			Till 14	years	15 – 17 years		
		AN	%	AN	%	AN	%	
2008	29840	26552	89,0	19312	64,7	7240	24,3	
2009	25815	20058	77,7	14108	54,6	5950	23,0	
2010	16575	13829	83,4	10691	64,5	3138	18,8	

One of the basic functions of branch of sports medicine is диспансерное supervision of the persons who are engaged in physical culture and sports. Prophylactic medical examination provides regular medical control over sportsmen, for the purpose of reception of the full and allround information about health, physical development, a functional condition and level of working capacity of an organism at the basic stages of a training cycle, and also behind adequacy of physical activities and organism restoration. By results clinical supervision the sports doctor solves a question on the admission of the sportsman to trainings and to competitions.

In dynamics for 3 years decrease in references of the young sportsmen who have passed prophylactic medical examination in CYSS on third (- 38.3 %) at the expense of reduction of departures in улусы because of shortage of financing (tab. 2) also is marked. The number of the pupils of republic CYSS captured by prophylactic medical examination remains at one level (2008 – 6979, 2010 – 7005) and makes approximately 20 % from total of pupils of republic CYSS.

Table 2

Quantity of references the persons who are engaged in physical culture and sports, passed prophylactic medical examination depending on group of physical activity (Absolute number (AN, %)

YAKUT MEDICAL JOURNAL



Years	Total of references.	Sportsmen of national teams		CYSS		Sports sections		The general physical preparation	
		AN	%	AN	%	AN	%	AN	%
2008	18406	4383	23,8	6979	37,9	2851	15,5	4193	22,8
2009	17385	3226	12,5	8649	33,6	2991	11,6	2519	9,7
2010	11368	2079	18,3	7005	61,6	1674	14,7	612	5,4

The analysis of the revealed general disease following the results of medical inspection of pupils CYSS Yakutsk in 2010 has shown that disease of young sportsmen has made 968,7 ‰ that below indicators of disease of young sportsmen according to the literature (1605 %) in 1,6 times [1], and in comparison with level of disease of pupils of comprehensive school Yakutsk (2423,0 ‰) more low in 2,5 times [4]. It can be caused that such experts didn't take part in medical inspection, as endocrinologist, the gynecologist, the urologist, the orthopedist - the traumatologist because of shortage of financing and shots. In structure of the revealed pathology on 1 place of illness of digestive organs – 296,8 ‰, basically at the expense of caries; on 2 place - illnesses of nervous system (291,6 %); on 3 place - illnesses of an eye (151,0 %); on 4 place illnesses of an ear and respiratory organs (135,4 %), further – illnesses of cardiovascular system (93,7 %). The estimation of a state of health of children who are going in for sports, has shown that 15,2 % from number of all young sportsmen that will be coordinated with the literature data [1, 6] are almost healthy. 75,5 % of young sportsmen have those or other deviations in a state of health, demanding additional inspection. Haven't got the admission to playing sports of 9,3 % of pupils CYSS at which such diseases, as a bronchial asthma, miopiya average and high degree, illness of Shejermana-Mau, illness of Ostgut-Shljattera, adhesive illness, small anomaly of heart, a chronic pyelonephritis, a sleep-walking are revealed. It has resulted from defects in system of selection of young sportsmen at the initial stage.

Thus, the revealed general disease of young sportsmen following the results of medical inspection not completely reflects the valid picture of a condition of their health because of shortage of financing and deficiency of medical shots. In this connection, we offer perfection of medical maintenance of young sportsmen at municipal level without additional financial expenses:

1. In modern conditions in questions of medical maintenance of young sportsmen following establishments should be engaged: branch of sports medicine of the centers of physiotherapy exercises and sports medicine, territorial children's polyclinic, the rehabilitational-improving



centers (branches) that will allow to adjust continuity between head establishment and an outpatient-polyclinic link.

- 2. During trainings, gathering, competitions it is expedient to render health service of young sportsmen the qualified experts of the center of physiotherapy exercises and sports medicine. Strengthening of a brigade of experts of branch of sports medicine by doctors - experts of children's polyclinic (the endocrinologist, the gynecologist, the urologist, the stomatologist etc.) for carrying out of profound medical inspection of pupils CYSS.
- 3. To introduce complex inspection of all wishing to go in for sports children in the Center of health for children on formation of a healthy way of life with carrying out of questioning of parents for the admission of children to playing sports. Carrying out in the subsequent annual dynamic supervision in the center of health for monitoring of a state of health of young sportsmen. Complex laboratory-tool research will allow to receive complete multilateral representation about mentally – emotional and functional conditions of an organism of the young sportsman and possibilities of increase in level fitness and achievements of the maximum sports results by it; to find ways of the complete approach to quality of medical inspections of young sportsmen.
- 4. Carrying out of rehabilitation and improving actions in existing branches of regenerative treatment of territorial polyclinics and hospitals and the organization of improvement of young sportsmen in summer sports camp.

Conclusions

Problems of organizational character in medical maintenance of young sportsmen in republic are revealed: a severe shortage of medical shots and insufficient it is material – technical base, both in the republican center, and at child-youthful schools; absence of the medical block at sports schools; absence of continuity between the republican center and an out-patient-polyclinic link. The offered system of perfection of medical maintenance of pupils child – youthful sports schools, including system of selection of children for employment by various sports at municipal level will allow to improve quality of rendering of medical aid and to lower level of disease of young sportsmen without additional financial expenses

The literature

- 1. Guryanov M. S. The State of health and ways of perfection of health services of pupils CYSS: the Author's abstract diss. of candidate of medical sciences. – Kazan, 2002. – 24 p.
- 2. Korneyev I.T. Pathogenetic of a basis of correction of functional changes of heart of young sportsmen: the Author's abstract diss. of candidate of medical sciences. – Moscow, 2003. – 40 p.



- 3. Nikolaev JU.M. Theor of physical training: formation and development of the culturological approach / JU.M. Nikolaev//the Theory and practice of physical culture. – 2009. - № 12. – p. 3-8.
- 4. Nogninova O.V/ State of health and the organization medical the social help to children to orphans and children who are in a difficult reality situation: the Author's abstract diss. of candidate of medical sciences. – Moscow, 2009. – 24 p.
- 5. Polynskaya E.A. Results of use of regional technology of formation of a sports reserve (organizational aspect, on an example of the Lipetsk region / E.A. Polynskaya//the Theory and practice physical culture. -2011. - $\Re 6$. - p. 8-11.
- 6. Shestavina N.V. State of young sportsmen and medical organizational actions for decrease in their disease: the Author's abstract diss. of candidate of medical sciences. – Moscow, 1997. – 24 p.