# A.D.Savvina, T.V. Egorova, L.O. Markova, E.P. Mihaylova, L.V. Prohorova, N.V.Savvina, M.D. Govorova

## **Health Schools as Preventive Technology**

#### **ABSTRACT**

The paper deals with the problem of forming healthy lifestyle. Thыe aim of the development and introduction of organizational and educational programs in activity of children's medical organizations is a culture of healthy lifestyle. The purpose of the study is an analysis of the educational activity of consulting centre specialists of the polyclinic "Children's city hospital".

**Keywords:** schools of health, healthy lifestyle, children.

#### INTRODUCTION

The Priority of the preventive measures, directed to declining prevented reasons of children's diseases, disability and death-rate. Pediatrics is itself a preventive discipline; the object of its activity is not the sick, but also healthy child. However often means and efforts, first of all, are directed to the treatment, rather than to the preventive maintenance.

The leading factor in arising the deflections of health state and diseases of population is a lifestyle. Forming the view on healthy lifestyle of population is necessary to start at young age. Consequently, the main view on healthy lifestyle must be put at period of the school education [1]. The data of the literature are indicated to the low level of schoolchildren's motivation in healthy lifestyle [2].

Forming healthy lifestyle (FHL) is a complex of actions, directed on preservation of health; the propaganda of healthy lifestyle; motivation of children and teenagers to the personal responsibility for their health; the development of individual approach on forming healthy lifestyle; the prevention of the risk factors of the diseases; the enlightenment and informing the population about harm of tobacco and alcohol; the prevention of social-significant diseases; increasing active life expectancy [2].

The lifestyle of children is closely connected with the lifestyle of their parents. Atyoung age habits and values of the person are formed. Much a great deal in this plan depends on the personal example of adults, their behaviour, and relation with their child.

The Sanitary enlightenment, hygenic education and preventive maintenance of the diseases, vaccinated skills of healthy lifestyle, propaganda of the healthy lifestyle presents itself well forgotten old. On estimation of specialists, at present this is the most optimum way of the

real declining children's diseases [2, 3]. The aim of the development and introduction of organizational and educational programs in activity of children's medical organizations is a culture of healthy lifestyle. Medical activity of families is innovative technology of the preventive pediatrics.

Many forms of the pathological states are developed at child's age under the influence of unfavorable factors of surrounding world. For instance, atherosclerosis, diabetes and particularly hypertensive disease causes at child's age. Functional and morphological deviations of children often move over to chronic diseases. So, preventive maintenance of the chronic diseases must include increasing resistant strength of the organism and liquidation of the violation in health state [4].

The Program of health care of modern schoolchildren in condition of the complex informatization of the educational process can include the following components: rational nutrition, optimum motor activity, observance of daymode, warning bad habits and increasing psychoemotional stability. Education at school must not harm the maturation of the physiological child'ssystem. 80% of loads in school educational process accounts for visual analyzer of the children.

The **purpose** of the study is an analysis of the educational activityof consulting centrespecialists of the polyclinic "Children's city hospital".

**THE MATERIALS AND METHODS:** analysis of sanitary and educational activity of the specialists on forming healthy lifestyle for 2011 - 2014 years on annual reports data.

Activity of the Health schools of consulting centre of the chidren policlinic is specified following federal normative documents: Resolution of the Government of RF № 413 from 18 May 2009 "About financial provision in 2009 to account of the funding the federal budget action, directed on forming healthy lifestyle by citizen of the Russian Federation, including reduction of the consumption of the alcohol and tobacco", Order of the Ministry of Health and Social Development of Russia № 302 from 10 une 2009 "About measures on realization of the resolution Government of Russian Federation from 18 May 2009", Order of the Ministry of Health and Social Development of Russia № 597 from 19August 2009 "About organizing Health centres activities on forming healthy lifestyle citizens of the Russian Federation, including declining of the alcohol and tobacco consumption". On their foundation were prepared following normative documents by Ministry of Health of the Sakha Republic: order of the Ministry of Health of the Sakha Republic №01-8/4-745 from 02.07.2009 and Territory Fund of Obligatory Medical

Insurance of the Sakha Republic №270 from 02.07.2009 "About position of "Health schools for children", about statement methodical recommendations".

According to the orders of the Chidren's city hospital № 313 from 14.10.2010 "About organizing activities of the Health Schools for children" and № 097 from 25.03.2013 "In addition to order № 313 from 14.10.2010 "About organizing activities of the Health Schools for children" are approved educational programs of health schools and are nominated responsible physicians-specialists on conducting the health schools, and is approved the Order of the conducting medical documentation. In consulting centre 7 health schools work: for sick children - 3 schools (the individual occupations), for conditionally – health children - 4 (the occupation in small groups). For sanitary-education of the sick children Gastro-school, Allergo-school work. There is aschool for children with the epilepsies in the individual occupation. For the conditionally –health children of the school age work the schools of health on preventive maintenance cardiovascular diseases, caries, myopias, girls' reproduction systemdiseasesin small group occupations.

Function of these schools is the conducting of the preventive lectures in educational institutions. Each school consists of 4 occupations, the first half of the occupation is the theoretical part, and the second is the practical. Each specialist of the health school conducts a journal of the certain form with children's signature trained at school.

The educational purpose of the sick children in the health schools is an improvement of lifes quality. The tasks of the health school for the sick children are: 1. Giving to patient and his parents the notion about nature and reasons of the diseases, teaching the skills to warn and get over the symptoms of the diseases; 2. Forming the partners' relations between physician and patient, his parents and forming rational active relations to disease, motivations to recovery, adherences to treatment and execution the recommendations of the physician.

Allergo-school is conducted by two educational programs: "Preventive maintenance of the allergic diseases and children's dermatitis" and "Preventive maintenance of the allergic diseases and bronchial asthma of children". Gastro - school has several programs: "Medical actions and preventive maintenance at constipation", "Dyskinesia of bile ducts", "Lyamblioz and helminth invasion", "Dietotherapy under tseliakia".

The Educational program "Preventive maintenances of the diseases of the girls' reproduction system" comprises the following themes: "Healthy lifestyle - a base of girls'health care", "Preventive maintenance of the diseases feminine sexual spheres of girls-teenagers", "Preventive maintenance of unplaned pregnancy of girls- teenagers", "Preventive maintenance

of the sexual diseases of girls - teenagers". The educational program "Preventive maintenance of cardiovascular diseases" consists of the following themes: "Notion about diseases of the cardiovascular system, factors of the risk", "Healthy lifestyle is a preventive maintenance of the cardiovascular diseases", "Principles of the healthy nutrition. The Motor activity", "Preventive maintenance of bad habits: tobacco consumption and beer alcoholism".

Ophthalmo - school is conducted as an educational institution for small groups of chidren. The teaching is organized by two programs: for preschool children and schoolchildren. From the multiple methods of the preventive maintenance in the program are enclosed three methods. They are distinguished by high efficiency, reality of the introduction and not requiring significant financial expenseses: enlightenment the population about the risk factors of the declining visual abilities, hygiene of the vision and carrying out medical-training occupations with contingent "risk group".

The Purpose of the education: warning the declining of the children's vision in educational institutions. Ophtalmologist estimates the visual abilities of children for discovery vision violations and the contingent of "risk group"; carries out the occupations: "Preventive maintenance of the declining of the visual abilities" for the preschool children and "Myopia is the main reason of the declining of the vision of children from the age of 7 till 11; the risk factors, the hygiene of the vision, preventive advices" for schoolchildren; carrying out medical-training occupations for the contingent "risk group", video training for the children with the violations of the vision, computer program "Relax", magnet — stimulation of biologically active points; the conversations and medical-training occupations with the tutors, parents.

Efficiency of the education of preschool children was valued by the following criterions: the reduction of complaints; increasing the reserves of the relative accommodation; the active participation of the parents in the preservation of the child'svision. Efficiency of the education of schoolchildren was valued by the following criterions: increasing of the the reserves of the relative accommodation; improving the sharpnesses of the vision on 10-40%; the weakening refraction of the myopia on 0.5-1.OD; the active participation of the parents in the preservation of the child's vision.

Statistical processing of results was conducted bythe computer program Microsoft "Excel".

#### **RESULTS AND DISCUSSION**

24156 persons are trained in health schools, 62328 visits are organized in education institutions in 2011-2014. Number of schools is increasing each year: there were 3 schools in 2011: Allergo-school, school of the preventive maintenance of the diseases girls' reproduction system, school of the preventive maintenance of cardiovascular diseases. In 2012 was introduced the school of the preventive maintenance of the caries. In 2013 were introduced Gastro-school, Epilepsy- school, Myopia – school (Tabl.1). In 2014 the most amount of the children were trained in educational institutions by the physician-gynecologist (37,3%), ophthalmologist (20,9%), pediatrician (19,1%).

Table 1
Assignment the healthschools in 2011 - 2014 (abs. number)

Name of the schools	2011	2012	2013	2014
Gastro-school	-	-	524	826
Allergo-school	40	50	339	219
Protection of the reproduction health	2124	2360	2372	2776
Ophthalmo-school	-	-	819	1556
Preventive maintenance of the caries	-	87	387	437
Epilepsy school	-	-	40	196
School of the preventive maintenance	2905	4456	681	1419
	5069	6903	4755	7429

Before and after the carrying out the healthschool the questionnaire is conducted for estimation of efficiency of the educational program. For instance, the questionnaire for the preventive maintenance of the tobacco consumption has shown the following results. Before the visiting the health school each fifth teenager (20%) has considered that advertisment of the tobacco in mass media is directed to adults, after the listening lectures with showing the film about harm of the tobacco the share of the teenagers who revised their look at advertisment of the tobacco has increased in 4 times and has formed 77,1%. In most cases the teenagers (65,5%)would like to have the non-smoker family in future, after the visiting the health school their share has increased on 7% and has formed 72,5%. The full prohibition of the tobacco advertisment was supported by 57,6% of teenagers before the visiting the health schools and 70,9% after the visiting the school (+13,3%).

For this period in health schools were trained 1556 children, 76 of them were of the

liceum.

Table 2 Factors of the Opthtalmo - school functioning in 2014

Revealled pathology		6 age		7-10 age		10 -17 age		total	
		Abs	%	Abs	%	Abs	%	Abs	%
		number		number		numb		numb	
						er		er	
trained		76		1127		353		1556	
Revealled		10	13,2	423	37,5	126	35,7	559	35,9
Spasm of the acco	mmodation	6	7,9	236	20,9	0		242	15,5
Myopias		0		119	10,5	126	35,7	245	15,7
Astigmatisms		2	2,6	55	4,9	0		57	3,7
Hypermetropiya		2	2,6	11	1,0	0		13	0,8
Innate anomalies	of the development	0		2	0,2	0		2	0,1
Efficiency	Improvement	8	80,0	324	76,6	69	54,7	401	71,7
	Without change	2	20,0	99	23,4	57	45,3	158	28,3

preschool age (4,9%), schoolchildren - 1480 (95,1%). Ophthalmo - schools were organized

inkindergartens№77 "Fairy tale", №45 "Strawberry", in schools №6, №7, in physics - technical

35,9% of them had pathology of the vision organs. In most cases on nosology are diagnosed: spasm of the accommodation - 15,5%, myopia - 15,7%. Efficiency of the education in Ophthalmo -school has formed 71,7%.

Educational functioning of the centre includes: presentation of the lectures on the different subjects; the demonstration of the video materials: films "Truth about tobacco", "Prodigy of the lifes", "Chizhik-pyzhik, where were you ...", "Taking careof yourself", "Carbohydrates"; the development, publishing and spreading the information brochures, booklets devoted to varied themes; work with mass media; the forming thematic stands for the preventive actions, dedicated to memorable date: "Non-smoking day", "International non smokingday", "Day of the fight with AIDS", "International girls day " and others. Besides are conducted the parental conferences on forming the motivation to healthy lifestyle ("The role of the familyon the formingthe healthy lifestyle", "The happiness to be a father! » thematic meetings and lectures for the parents ("Healthy nutrition", "Sexual education", "Bad habits", «Save the child'svision").

On the whole for 2011-2014 are organized 2141 actions on propaganda the healthy lifestyle, the participants - 22726 Tabl.3). For 4 years the number of the participantshas been increased in 1,6 times, work with mass mediawas actuated.

Table 3
Sanitary-educational functioning of the "Children's city hospital" for 2011-2014

Actions	2011		2012		2013		2014	
	total	number	total	number	total	number	total	number
Total	390	14071	497	12643	560	11908	405	22726
Work with mass media	6		20		42		46	
Lectures, group conversations	69	5212	54	3571	161	4916	70	3501
Round tables	7	2117	10	295	14	597	14	508
Healthlanding	0		9	1032	21	1427	18	4439
Sport health actions	4	101	3	51	6	70	4	79
Publishing activity	1	500	23	1800	18	500	10	1500
Sociological investigation	20	680	12	246	6	278	5	210
Health schools	266	5318	345	6903	259	5177	382	7429
Health fairs	6	601	5	251	8	329	14	382
Parental conferences	1	42	11	295	8	556	12	845
Radio broadcasts	2		2		6		8	
Publications in the press	8		3		11		19	

In 2013"Children's city hospital" has won the Grant of the Head of Jakutsk (250000,00 rubles) for conducting healthy lifestyle among children and teenagers and has won the nomination "The best work with population" in contest hold by Republican organization of the trade union workmen of the Health on preventive maintenance for the tobacco consumption. On these facilities the book "Advices to the parents", brochures, booklets were designed and published; the models of organs and systems of the person for demonstration in the occupations of the health schools were bought. In 2014 "Children's city hospital" has won the nomination "Lodestar" of the International Fund Children of Asia "Bargaryy" for the active work with the chidren on propaganda for the healthy lifestyle.

#### **CONCLUSION**

Educational and social environment forms the lion's share of the contribution in the forming the health of the children and teenagers. It can be modified and corrected. It is necessary to change the existing lifestyle, education conditions, nature of the nutrition, and the mode of

the labour and rest not only for children and teenagers, but also for the parents. The Success in educational functioning is possible to reach only on condition of the partner's interaction, having united efforts of medical workers, teachers, psychologists, social workers, parents and children themselves.

#### **REFERENCES**

- 1. Abanin A. M. Aftoreferat "Ukreplenie zdorovya skolnikov na osnove formirovaniya zdorovogo obrasa zhizni" [Strengthening health of the schoolchildren through the development of a healthy lifestyle: Abstract ... .dis MD], 2004, Nizhniy Novgorod.
- 2. Baranov A.A. Albiskiy V.YU. Palamarchuk S.I. Metodika socialno-hygienicheskogo isledovaniya obraza zhizni detey gruppy riska [Methods of social and hygienic lifestyle study of children at risk]. V kn.: Metodologicheskie, sozial hygienic i socialno-hygienicheskie and clinicheskie aspect profilactiki zabolevany v usloviyach razvitogo cozialisticheskogo obchestva [Methodological, social-hygienic and clinical aspects of disease prevention in developed socialist society]. Moscow, 1984, p.11.
- 3. Vorontsov I.M. Zdorovie I nezdorovie rebenka kak osnova professionalnogo mirovozzreniya i povsednevnoy praktiki detskogo vracha [Health and illness of the child as a basis for the professional ideology and the everyday practice of a pediatrician] Rossiyskiy pedriaticheskiy zhurnal [Russian Pediatric zhurnal]. 1999, 2, p.6-13.
- 4. Konnikova E.E., Popova I.E. Osnovy medisinskich znaniy: Uchebnoe posobie [Fundamentals of medical knowledge: a tutorial]. М-во здоровья РС (Я) [Ministry of Health of Republic Sakha (Yakutia)], Saha gos. ped. Akad [the Sakha State RS(Y)]: Yakutsk, 2005-144 p.

### The authors

## GBU RS (Y) "City Children's Hospital"

**Savvina Anastasia D.** – PhD, Assistant Professor, Head of polyclinic, E-mail: 866031@mail.ru; Yakutsk, Republic of Sakha (Yakutia), Russia.

**Egorova Tatyana V.** - graduate student of the MI AmmosovNorth-Eastern Federal University, a head of the health center, E-mail: tatvasegorova@gmail.ru, Yakutsk, Republic of Sakha (Yakutia), Russia.

**Markova Lyudmila O.** – Ophthalmologist, E-mail: dqb10@ inbox. ru, Yakutsk, Republic of Sakha (Yakutia), Russia.

**Mikhailova Elena P.** - doctor gastroenterologist, E-mail: dqb10@ inbox.ru, Yakutsk, Republic of Sakha (Yakutia), Russia.

**Prokhorova Elena V**. - doctor gastroenterologist, E-mail: dqb10@ inbox.ru, Yakutsk, Republic of Sakha (Yakutia), Russia.

**Govorova Maria D.** - deputy chief physician, E-mail: dqb10 @ inbox.ru, st. Petrovsky, 10/1, Yakutsk, Republic of Sakha (Yakutia), Russia.

Savvina Nadezhda V. – MD, Professor, Head of the Department of childhood diseases, obstetrics- gynecology, with the course Health Organization and public health FPOV FSAEI VPO Ammosov North-Eastern Federal University, Business address: 677000, st. Belinsky, 58, E-mail: nadvsavvina@mail.ru.