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Health and living conditions of the rising generation

The article presents the research results of the rising generation's quantitative and qualitative characteristics in Russia and in the Vologda Oblast. The main trends characterizing children's health, their living conditions and lifestyle in their families are revealed in the article. Today the primary task of social policy in terms of child population increase is to provide the rise of their qualitative potential and living standards.

Children's health, living conditions and lifestyle, child neglect, incomes of families with children.

Nataliya A. KONDAKOVA
ISEDT RAS Junior Scientific Associate
natali-kopeikina@mail.ru

Nowadays the Government of the Russian Federation pays more and more attention to the socio-demographic development of the country. National priority projects "Health", "Education", "Affordable housing" started in 2005, demographic programmes have positively influenced the country's socio-economic development. All of them are assigned to improve people's quality of life, to preserve and strengthen population's health, to amend the demographic situation. However, the children's health continues getting worse as evidenced by the results of lasting research studies (A. Baranov, E. Breyeva, I. Zhuravleva, O. Kislitsyna, Y. Lisitsyn, N. Rimashevskaya, A. Shabunova).

This article is aimed at quantitative and qualitative characteristics analysis of the rising generation (aged from 0 to 17 years). The emphasis will be laid on health, which is not only the basis of sustainable development of the Russian society today, but influences the country's development in future.

Appealing to the characteristics research of the rising generation, several main trends can be marked:

1. Decrease in child population is noteworthy. From 2000 to 2010 the proportion of children in the total population of the country reduced from 24 to 18%. Similar situation is observed in the Vologda Oblast, where the child population rate over the specified period decreased by 5% (from 23 to 18%) [12].

According to the forecasts of the Federal State Statistics Service, in 2030 the rate of population under working age will remain intact and comprise 16% as in 2011. However, the reduction will be observed in absolute figures: from 2011 to 2030 the population of this category in the Vologda Oblast will decrease by 9% equal to 181 thousand people, national average – by 1.5% (22845.4 thousand people). In the meantime the working-age population rate will reduce by 7% both in national average and in the Vologda Oblast *(tab. 1)*.

Consequently, ageing population process is evidenced and will continue. Rapid growth of elderly and aged people rate involves inevitable structural transformations in the economy, institutional environment, and changes in social benefits flow [13].

As a result of demographic policy carried out by the Russian Government, since 2006, the country's birth rate has increased from 10.4 to 12.5 ‰, in the Vologda Oblast this figure (over a period of 2006 – 2010 has increased from 10.9 to 12.5 ‰) conforms to the nationwide rate. Nevertheless, the birth rate remains lower than necessary even for new generations to replace parental cohorts, which do not allow overcoming population reduction *(tab. 2)*. Hence, over 11 years the population in the region has decreased by 7.6%, comprising 1 201.2 thousand people in 2011 that exceeds reduction pace nationwide (over 4 million. people or 2.7%) [12].

Birth rate increase is mainly connected with introduction of maternity capital and nursing benefit till 18 months in Russia in 2007. Essentially, these measures are aimed at birth support in the families that have children, whereas many families delay first-birth.

Despite the rise in births, uniparous families are predominant in Russia. According to the National Population Census (2010) in households (both in the city and in the country) uniparous families prevail. During the intercensal period the amount of households without children under 18 rose by 15%; the amount of households, which consist of two and more people and have children under 18 reduced by 8% (from 52% in 2002 to 44% in 2010) [12].

Child development in uniparous families is subject to risk. On the one hand, his parents have more opportunities to give a fair deal for the development. On the other hand, adults pay excessive attention and hyper-care to him. As a result, a child's selfishness and steep demands to surrounding people are shaping.

Table 1. Age distribution forecast in the Russian Federation and the Vologda Oblast (VO) for the period until 2030 (average variant of the forecast, in % due to the total population)

Year	Under working age		Working age		Over working age	
	RF	VO	RF	VO	RF	VO
2011	16.3	16.5	61.6	61.2	22.0	22.3
2015	17.4	17.8	58.8	57.9	23.8	24.3
2020	18.3	18.6	55.7	54.6	26.0	26.8
2025	17.8	18.0	54.7	53.8	27.4	28.3
2030	16.4	16.4	55.1	54.4	28.5	29.2

Source: Unified Interdepartmental Statistical Information System. Available at: http://www.fedstat.ru/indicator/data.do

Table 2. Natural population movement in the Russian Federation and the Vologda Oblast

Year	Population, thousand people		Crude birth rate, ‰		Crude death rate, ‰		Natural decline, ‰	
	RF	VO	RF	VO	RF	VO	RF	VO
2000	146 890.1	1 299.6	8.7	8.8	15.3	16	-6.6	-7.2
2006	142 753.5	1 235.4	10.4	10.9	15.2	17.1	-4.8	-6.2
2007	142 220.9	1 227.8	11.3	11.6	14.6	15.9	-3.3	-4.3
2008	142 008.8	1 222.9	12.1	12	14.6	16.3	-2.5	-4.3
2009	141 903.9	1 218.2	12.4	12.4	14.2	16.2	-1.8	-3.8
2010	141 914.5	1 213.7	12.5	12.5	14.2	16.8	-1.7	-4.3
2011	142 865.4	1 201.2	12.6	13.0	13.5	15.7	-0.9	-2.7

Source: Federal State Statistics Service. Available at: http://www.gks.ru/dbscripts/Cbsd/DBInet.cgi?pl=2415019

2. The next trend is child's health deterioration, which plays a critical role not only in demographic development, but it also determines the quality of the territory's human potential. Among all the age-groups of population child's health condition tendencies became the most unfavorable. During 2000 – 2011 child disease incidence has increased by 32% (in 2011 it equaled 1932 cases per 1000 age-appropriate people), in the Vologda Oblast – by 37% (in 2011 – 2533 cases respectively); while among adult population total disease incidence rose by 8% in the whole country, and by 3% in the region [12].

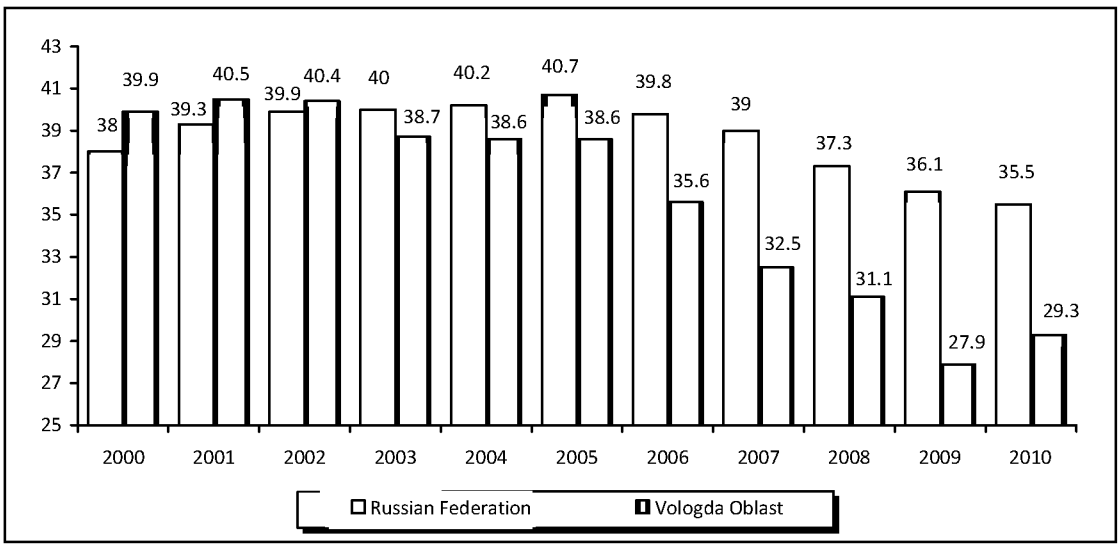
However, it is worthwhile to note certain positive changes in newborn's health condition. As a result of implementing regional target programmes "Healthy child" and the national priority project "Health" [2] newborn disease incidence in the Vologda Oblast has reduced by 27% during 2000 – 2010. At the same time the situation on the country level is a little worse: disease incidence has reduced by 7% only *(fig. 1)*.

Nevertheless, during the growing-up process starting from birth, children's health potential is constantly declining. And, as the scientists note, the most substantial prevalence rate growth of chronic diseases, abnormal physical development, frequency of acute distress and exacerbation of chronic pathology take place during the process of systematic education (while studying in pre-school, general secondary, elementary and secondary vocational educational institutions) [7].

According to the Ministry of Healthcare and Social Development of the Russian Federation, in Russia in 2010 the following figures were mentioned among the school-children due to their health condition: first group (healthy) – 21%; second group (healthy, but with some functional abnormalities) – 59; third group (with chronic diseases) – 18; forth and fifth groups (disabling diseases) – 2% of the children [7].

The main diseases, which are spread among children more often, are: eye diseases (myopia), diseases of musculoskeletal system (postural

Figure 1. Newborn disease incidence (%, to the total amount of quick-borns)



Sources: Statistical yearbook of Russia. 2010: statistical abstract. Rosstat. Moscow, 2011.; Statistical yearbook of the Vologda Oblast: statistical abstract .Vologdastat. Vologda, 2011.

disorder, scoliosis), diseases of digestive system. However, medical workers note that 70% of abnormalities fixed in lower grades transform into chronic form by the graduation from school [10].

Children's health deterioration is confirmed not only by the official statistics data, but also by the results of sampling social studies. In March 2012 the Institute of Socio-Economic Development of Territories of the Russian Academy of Sciences (ISEDT RAS) conducted a research in two schools in Vologda: School No. 1 with advanced study of English, where study load for pupils is enhanced in comparison with ordinary comprehensive school, and School No. 13 (ordinary comprehensive school)[1].

Analysis of grouping according to health condition showed that in both educational establishments the distinct tendency of reducing the proportion of the first group of children to senior school is visible and simultaneously increasing of the children with the third and forth groups *(fig. 2)*.

Unfavorable trends in children's health condition lead to such negative social and economic consequences, as unpreparedness to schooling, academic failure, inability to realize his/her labor potential, elaboration disorder of reproductive function, and diseased generations' birth, etc.

3. Families' income level in Russia continues declining, which influences the children's living conditions. A great number of children live in low-income families. According to a sample inquiry of household budgets, in 2010 families with children under 16 years comprised 57.5% of the total number of households accommodating resources lower than minimum subsistence level (in 2009 – 54.6%), including families with one child – 31.2%, families with two children – 20.3%, families with three and more children – 6%. The same situation is observed in the Vologda Oblast, where families with children under 16 years comprise 55% among low-income population [8]. When a family's living conditions are poor, it does not have an opportunity to offer all the necessary facilities for normal development, to provide good rest during summer holidays, and to organize healthy and proper nutrition, etc.

Analyzing the level of average available resources per capita in the families with various amounts of children gives evidence of welfare decline in the families with three children. In 2010 such category of families had the lowest level of average available resources per family member – 5 460 rubles per month contrary to 12 071 rubles in families with one child and 8 716 rubles in families with two children. However, meal expenses remain the main expenditure item of the family budget. Within consumer expenditure they comprised 38% (in 2009 – 41.3%) [8].

Providing a child with necessary nutrition considerably depends on family's social position and its financial capabilities. Judging by the data from the monitoring of child health forming conditions, conducted by ISEDT RAS from 1995 up to the present day[2], in the group comprising 20% of lower-class families the share of those who pointed out bad provision of children with foodstuff twice or even 5-fold exceeds that of the groups of middle-class and upper-class families *(tab. 3)*.

[1] In both schools the questionnaire was conducted among the students (1st, 5th, 9th and 11th forms). These forms are selected, because exactly these periods are critical for children: beginning of schooling (1st form), beginning of middle school (5th form), and transition to senior school (9th, 11th forms). In both schools 577 pupils aged from 7 to 18 years: in School No. 1 – 324 pupils (1st form – 107; 5th form – 92; 9th-11th forms – 125); in School No. 13 – 253 pupils (1st form – 84; 5th form – 82; 9th-11th forms – 87).

[2] Monitoring of child health forming conditions is conducted by ISEDT RAS from 1995 under technical guidance of ISESP RAS. Medical workers are engaged for evaluation children's health and development. Families, whose children were born in the certain periods: May, 15-30 1995 (first cohort) and March, 1-20 1998, 2001 and 2004 (second – fourth cohorts) take part in survey organized in the Vologda Oblast (Vologda and Cherepovets, district centres Kirillov and Velikiy Ustyug, urban-type settlement Vozhega). Monitoring supposes complex tools usage based on sociological questionnaires.

Figure 2. Distribution of pupils according to their health state, %

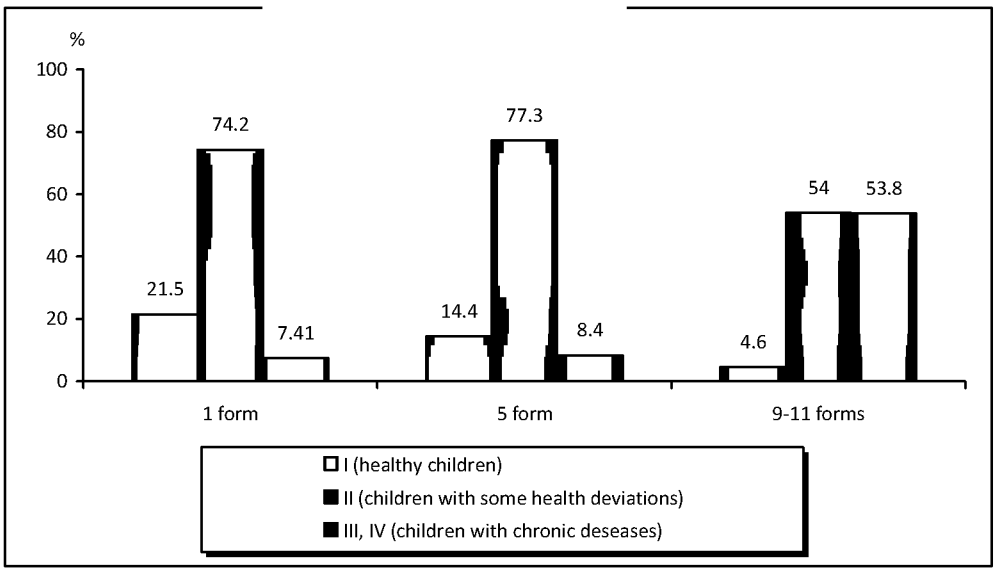


Table 3. Foodstuff provision of children depending on family's financial situation in 2011 (in % of the number of respondents)

Foodstuff provision of children	20% of lower-class				60% of middle-class				20% of upper-class			
	7 years	10 years	13 years	16 years	7 years	10 years	13 years	16 years	7 years	10 years	13 years	16 years
Good	35.7	13.3	15.4	44.4	43.6	45.5	42.6	34.4	64.3	56.3	58.7	60.0
Satisfactory	64.3	73.3	69.4	44.4	53.8	47.7	52.6	62.5	35.7	43.8	41.3	40.0
Unsatisfactory	0.0	13.3	15.2	11.1	2.6	6.8	4.8	3.1	0.0	0.0	0.0	0.0
Source: Monitoring of child health forming conditions. ISEDT RAS, 2011.												

Table 4. Influence of foodstuff provision on children's health in 2011.

Foodstuff provision	Health group of children							
	Children born in 1995		Children born in 1998		Children born in 2001		Children born in 2004	
	R1	R2	R1	R2	R1	R2	R1	R2
Good	24.3	75.7	17.6	82.4	15.4	84.6	13.6	86.4
Satisfactory	24.3	75.7	18.2	81.8	6.3	93.8	6.0	94.0
Bad, very bad	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0
R1 – group with minimal risk of health deterioration R2 – children with various health abnormalities and chronic diseases Source: Monitoring of child health forming conditions. ISEDT RAS, 2011.								

Malnutrition can lead to such negative processes as decrease in immunity, and disorder not only in physical, but also in mental development of the child. According to the results of monitoring, all the children with "bad and very bad" foodstuff provision have health abnormalities *(tab. 4)*.

4. Problems of child neglect and homelessness continue to be relevant in Russia. Orphanhood statistics are inaccurate. Various departments, institutions and organizations mention different figures. For instance, Albert Likhanov, the chairman of the Russian Children's Fund, stated that according to the

Fund's data the number of orphans in Russia is at least 10% more than it is declared in the State report of 2007 [9]. That means not 731 000 but over 800 000 people (2007 – 2008). In contrast: after World War II in USSR the number of orphans was 678 000 children (1945). Today in Russia according to the statistical data there are 2 – 2.5 million homeless children, whereas according to the estimate of the Federation Council, the Public Prosecution Office of the Russian Federation and independent experts their number comprises up to 3 – 4 million.

Lack of a clear definition concerning the grade of the loss of control over a child's behavior to consider him/her as neglected and also a formalized procedure of neglect establishment, the absence of the neglected children registration procedure and the single record-keeping body lead to the extremely inaccurate figures of neglected children ratio.

Statistics take into consideration only neglected children who are placed into certain institutions and reside there, but not their real number. So, according to the statistical data by the Internet portal of the Ministry of Education and Science of the Russian Federation "adoptinrussia.ru", the maximum number of children without parental care was marked in Russia in 2005 (133034 people). A gradual decline of this figure is observed: 82177 orphaned children were recorded in 2011 *(fig. 3)*. In spite of incompleteness, it is possible to speak about their significance.

Orphanhood consequences are impossible to overestimate, and it concerns not only physical, mental and moral health and development deterioration of the rising generation, but also socio-economic situation in the country and in a particular region.

5. Changes in the lifestyle of families with children are quite alarming. No doubt, favorable conditions at early stages of their life play a critical role in further development. However, if an adult bears responsibility for his/her health condition by him/herself to a great extent, then children's health virtually depends on their environment. The urgency of the problem intensifies, because over the last years the tendency of polarization of families due to their living standards is observed, as well as instability of marriage, divorce and incomplete families' rate growth, interfamilial tensions and spreading of pernicious habits, in its turn lead to changing of the families' lifestyle.

Figure 3. The number of children without parental care in 2000 – 2011, people

Source: Internet portal of the Ministry of Education and Science of the Russian Federation / Department of youth policy, care and social protection of children. Available at: http://www.usynovite.ru/statistics/2011/1/

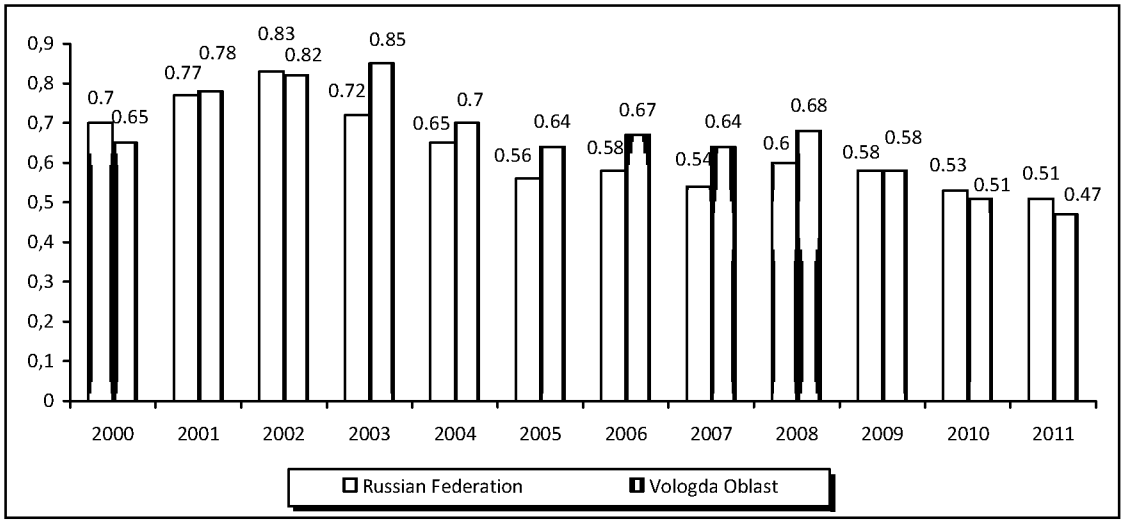
It is known that the main reason of increasing the share of incomplete families is divorce. During 2003 – 2008 the Vologda Oblast in comparison with the whole country took up leading positions in divorce rate due to number of registered marriages. The highest divorce rate was seen in 2003 and equaled 0.85 (divorce rate to the number of marriages), that means the marriage was dissolved by 85% of couples. However, from 2009 the reduction of this figure takes place both in Russia, and in the Vologda Oblast – 0.51 and 0.47 in 2011 respectively *(fig. 4)*.

As for the parents-children relations, judging by the results of monitoring [6], children characterize them generally as "harmonious" or "harmonious with occasional quarrels". Although the number of such estimates among 13-year-old children (93%) is higher than among 16-year-old ones (89%; *tab. 5*).

Psychological and physiological changes of children in the process of their growing up negatively reflect their behavior. Hence, there is no doubt that psychological aspects of family life, mutual relations established between children and their parents, counterparts and general life perception influence children's health.

Psychoemotional state of children aged 13 and 16 was examined on the basis of questions – statements blocks, method elaborated by I.V. Zhuravleva [3].

Figure 4. The ratio between the number of divorces and registered marriages



Sources: Demographic yearbook of the Vologda Oblast: statistical abstract. Vologdastat. Vologda, 2001 – 2011. P. 60.; Demographic yearbook of Russia: statistical abstract. Rosstat. Moscow, 2001 – 2011. P. 116; Russia in figures. 2012: statistical abstract. Rosstat. Moscow, 2012.

Table 5. Character of mutual relations in families (cohort of 1995, in % due to number of respondents)

Variants of responses	Children's age in the family			
	13 years	14 years	15 years	16 years
Harmonious, without quarrels	18.7	29.7	24.2	27.2
Harmonious, with occasional quarrels	74.7	57.6	66.1	61.7
Strained, without quarrels	0.0	3.8	1.9	4.9
Frequent quarrels	6.7	9.1	7.9	4.9
Source: Monitoring of child health forming conditions. ISEDT RAS, 2008 – 2011.				

Different questions were offered to adolescents and due to their responses their mutual relations with parents, counterparts and general life satisfaction were estimated. For every statement it was necessary to choose one variant – from "absolutely agree" to "absolutely disagree". Then Stress-ratio (S) was calculated as the correlation of extreme positions between negative and positive content. The more the share of negative responses, the more the value of the Stress-ratio *(tab. 6)*.

The highest Stress-ratio (1.48 – 2.4) was seen in the block "Life perception". Adolescents aged 13 have total Stress-ratio (4.8) higher than 16-year-old ones (3.15).

Good and comfortable atmosphere at home, at school also has a substantial influence on children's health. Comparing estimates of their own health condition and the Stress-ratio showed that children, who consider their health condition as excellent and good, have total Stress-ratio (2.72) lower than children, who estimate their health as "satisfactory" or "bad" (3.51).

Existence of pernicious habits among the children's immediate surrounding is a risk factor for their health and formation of self-destructive lifestyle. According to sociological data, in such families where at least one member was smoking, 12-year-old children tried smoking four times oftener (17%) than in nonsmoking families. By the age of 16 the number of children who tried smoking increased almost 3-fold (49%) [6]. Even at the age of 10 the share of smoking children comprises on average 4%, that further will have an extremely negative influence on their health. Received data is supported by other investigations too: 11-year-old pupils from Russia are the "leaders" in the

Table 6. Stress-ratios (S) as figures of mutual relations with parents, counterparts and surrounding people

Questions-statements	13 years	16 years
Relations with parents		
Mutual understanding with parents	0.04	0.18
Comfortable atmosphere at home	0.09	0.08
Respecting of adolescent's feelings by parents	0.05	0.11
Frequency of desire to leave the house	0.05	0.06
Pressure on adolescent from parents	0.25	0.05
Total in block	**0.48**	**0.48**
Relations with counterparts		
Self-confidence	0.05	0.04
Confidence in fact that it is joyful to be with him/her	0.08	0.05
Confidence in people's sympathy	0.25	0.14
There are some difficulties speaking to class	1.00	0.63
Popularity among counterparts	0.54	0.34
Total in block	**1.92**	**1.20**
Life perception		
Feeling of life's heaviness	0.04	0.05
Everything had got all mixed up in life	0.15	0.07
Frequent feeling of shame	0.61	0.22
Always show what he/she should do	1.00	0.14
Teachers lets feel shortcomings	0.60	1.00
Total in block	**2.40**	**1.48**
Total	**4.80**	**3.16**
Source: Monitoring of child health forming conditions. ISEDT RAS, 2011.		

European Region in the amount of smokers, at least once a week: 4% of girls and 5% of boys [17]. According to the World Trade Organization (WHO), in Europe almost every fifth adolescent (19.9%) aged 13 – 15 is smoking: boys (22.7%) a little more than girls (16.8%) [18].

One more pernicious habit, which can have a negative influence on the health of parents and their children, is alcohol abuse. The survey showed that if an alcohol consumption practice exists in the family, then 13% of children at the age of 12 and 70% of children aged 16 tried it, which is two times more than in families, where there is no such practice. It means that pernicious habits of parents have a significant influence on their children's health. According to Russian surveys, Russia is just behind Ukraine in level of consuming alcohol by 11-year-old pupils (7% of girls and 10% of boys consume alcohol almost once a week) [16]. Due to HBSC international report, in European countries on average 21% of adolescents aged 15 consume alcohol once a week. By the age of 16, two-thirds of adolescents already tasted alcohol [17].

To sum up, the most urgent problems for the rising generation can be marked:

– depopulation of children;

– children's health deterioration, including the spreading of pernicious habits;

– problem of low income in families with children;

– problem of underage neglect.

Summing up, it is necessary to point out that the main task of social policy is to enhance the children's quality potential and living standards. To improve the situation concerning child health, it is necessary to carry out a complex policy of healthy lifestyle in collaboration with holding activities aimed at improving financial and social status of families with children, revealing factors having influence on children's health. In this case the monitoring is required to help to determine the most vulnerable groups due to health condition, and also the socio-economic factors that influence population's health negatively. In the meantime, the efficiency of preventive actions regarding health care of children and adolescents, including those ones who are deprived of parental care, should increase.

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