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Modern Approaches to Preventing Drug Addiction by Means of Physical Activity and Sports

Vladimir Yurievich Karpov^{1,*}, Maksim Viktorovich Eremin¹, Margarita Aleksandrovna Petrova¹, Anatoliy Ivanovich Alifirov¹, Konstantin Konstantinovich Skorosov²

¹Russian State Social University, Moscow, Russia

²Penza State University, 40, Krasnaya St., Penza, 440026, Russia

Abstract

We suppose that preventive measures are of top priority in the strategy related to reacting against illegal use and turnover of drugs. According to our data, the approach based on strengthening health – forming healthy life style – is the most promising. It combines personal choice and social responsibility for health. The person's life competence is an important component of this concept. The basis of the program related to health strengthening is the development of the personality that has chosen a healthy life style of behavior. The latter not only positively influences personal welfare but also contributes to positive changes, social and cultural situation and the environment, as a whole. Social activity of the rising generation by means of physical culture can ensure their mental and moral activity. Approving such position will allow us to differently consider the phenomenon of physical culture that can develop stable mental sets and values systems among young people. These sets and systems allow to react against joining the environment of drug addicts and to maintain stable negative attitude to bad habits. The aim of our research was to develop organizational and methodological basis of counter-drugs physical culture and preventive work among teenagers. The results of our research prove that it is reasonable to perform special prevention by stages in relation to different categories of school children: primary psychological and pedagogical prevention must be applied to all school children, the secondary one must be applied to school children from the "high-risk group" and the tertiary one to school children who try psychoactive substances.

Keywords

Healthy lifestyle; Asocial behavior; Physical culture and sports; Prevention; Drug addiction; Bad habits

Introduction

Drug addiction leads to drastic psychic, personal and behavioral disorders, administrative violations and crimes, quitting educational establishments, vagrancy, getting infected with venereal diseases and AIDs [1-3].

Over recent years Russia has been developing and probating various directions to prevent drug addiction in the teenagers' environment. However, efficient grounds of preventive strategies are implemented with great difficulties. Quick dependence, labor intensity, durability, low efficiency of treating and rehabilitating drug addicts suggest that it is necessary to focus on precaution and primary prevention [1,2,4,5].

The efficiency of the means related to physical culture and sports in the prevention activity on caring and strengthening health is exclusively high in the fight against drug addiction, alcoholism and delinquency, especially in the teenagers' environment [1,2,6,7].

The deficit of physical activity that characterizes today's life causes discomfort in the rising organism of a child, a strife for searching for adrenaline buzz and going beyond all bounds. Even from these standpoints, it is obvious that involving children in systematic going in for physical culture and sports, opening the world of sports for them mean to considerably help them to avoid the danger of getting addicted to drugs.

Unfortunately, high preventive counter-drug potential laid in physical culture and sports cannot be implemented without specially developed pedagogical technologies.

Today's children and teenagers are not interested in going in for physical culture. Many of them lack stable interests in sports. In

particular, this contingent is more often apt to negative influence [6,8-11].

Owing to this, solving specific tasks related to counter-drug prevention by means of physical culture and sports will be the most efficient on the basis of implementing ideas of personal-oriented education.

Methods

In order to solve the set tasks, the following methods of research were used: theoretical analysis and generalization of sources of literature; generalizing the latest practitioner expertise; pedagogic observation; chronometration; human body measurements; estimation of constitutional types; check tests; medical and biological methods of research; examination of mental status and features of the personality; pedagogical experiment; methods of mathematical statistics. The research was carried out in municipal educational establishments and secondary schools with advanced study of specific subjects. Four hundred and ninety five pupils aged 11-17 participated in it.

Schoolchildren of two groups participated in the major pedagogical experiment. They included the control group (45 persons) including with criterion behavior and experimental (47 persons) including children with abnormal behavior who studied according to the counter-drug experimental program.

*Corresponding author: Karpov VY, Russian State Social University, Moscow, Russia; E-mail: vu2014@mail.ru

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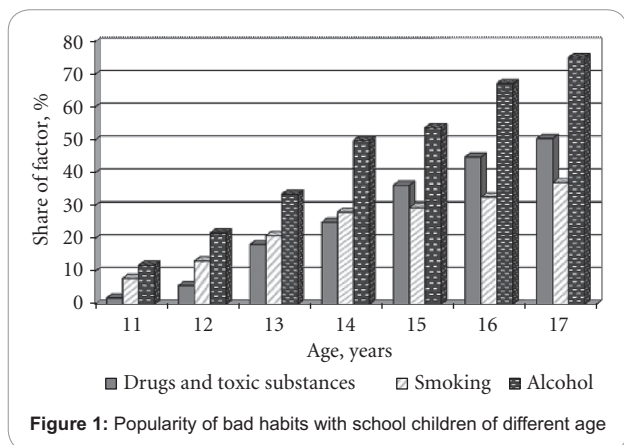
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Results and Discussion

According to our data, the major age when children and teenagers learn about drugs is 11-13 years old. In the process of research we obtained the data that the environment of the teenager respondents included those who tried and sometimes used drugs, inhaled toxic substances, were regularly in the state of alcohol intoxication. Anonymous researches showed that school children had acquaintances who had tried drugs and toxic substances: from 6.9% (aged 11) to 61.0% (aged 17). The most dangerous age is 13: at this time the indicator grows (126.7%). According to the respondents, friends told them about the "favorable" state after using drugs and offered to try them. With age the number of acquaintances who use drugs and drugs substances increases.

The examination of school children aged 11-17 allowed to reveal the drug abuse situation in the teenagers' environment. When polled, school children confirmed using drugs at least once in their lives: 2.0% – pupils aged 11, 25.0% – pupils aged 14, and 50.5% – pupils aged 17. The majority of respondents of different age evaded the question about the reason of using drugs. Many of them could not formulate the reason of using drugs; in certain cases (11.4-29.7%) they tried them in a social setting, and 16.2-28.3% (depending on the age) tried them due to interest; (4.5-20.0%) respondents tried drugs because of fallacious constraint to refuse. The tendency related to the growing the number of drug addicts is well-defined. The sociological picture demonstrating the state of the problem related to the school children's attitude to drugs is rather contradictory. On the one hand, the veracity of answers depends on the level of trustworthiness of children and teenagers to the researcher. That's why the results are subjective. On the other hand, the polls revealed the inconsistency of pupils' knowledge about bad habits and group behavior of teenagers. Figure 1 shows the level of bad habits popularity among school children of different age.

In order to define the frequency of discussing the theme related to drug addiction among children and teenagers, respondents were divided into three groups. The first group included pupils whose groups of friends had never spoken about drugs. In all age groups the number of such respondents happened to be the largest (aged 11-12 – 74.1%; aged 13-14 – 60.2%; aged 15-17 – 41.4%). The second group included those who discussed drugs with their friends rather rarely (aged 11-12 – 17.3%; aged 13-14 – 15.6%; aged 15-17 – 10.7%). The third group included those who often discussed the theme of drug addiction (aged 11-12 – 8.6%; aged 13-14 – 24.2%; aged 15-17 – 52.1%). Thus, the theme of drug addiction is interesting for pupils with "criterion



behavior" and from the "high-risk groups". The difference in thematic estimation according to the groups is essential. We have revealed the regularity. The more often the problem of drug addiction is discussed in the teenagers' environment, the less critically young people treat it. So, in the group where this problem was not almost touched on, the majority (80.4%) of respondents say it is harmful. In the second group this number is 24.3%, while in the third one it is 15.3%.

However, we have the results of the research that say about stable, steady and cheerful mood of the majority of children and teenagers that were polled. About half of them (48.5-57.6%) are little interested in issues related to drugs. It is positive that the majority (60.7-69.4%) of children and teenagers have negative attitude toward using drugs.

According to the respondents, the majority of parents (88.7%) have negative attitude toward using drugs; 10.3% of them display complete indifference, while about 1% (0.9%) of parents treat drugs positively. These indicators confirm the opinion that it is necessary to start the work related to preventing drug addiction in the family.

From 7.9% (aged 11) to 37.1% (aged 17) of all respondents of the researched contingent smoke regularly. The intensive growth of the number of people who regularly smoke is observed at the age of up to 15. Along with this, the majority of respondents (62.9-92.1%) answered that they did not smoke. However, a lot of respondents conceal this fact of asocial behavior.

From 11.9% (aged 11) to 75.2% (aged 17) of the children and teenagers who were polled drink alcohol. We revealed the most intensive growth of the number of pupils who drink alcohol at the age of 12-14. The respondents mainly drink beers. However, 70-80% children do it less than once a week. With age this indicator constantly increases and reaches 9.5% at the age of 17. School children aged as early as 13 start using strong drinks.

The influence of family upbringing on forming interpersonal relations of teenagers in the family and in society, selecting forms and types of the school child's leisure, its organization, adults' control over leisure are important problems. The analysis of interrelations of teenagers in the family, forms and types of the school child's leisure, its organization, the adults' control over leisure shows that this is the basis of ill-being and a place where undetected mechanisms of deviant behavior that contribute to the widespread of bad habits arise. Let's consider this problem specifically in order to define what types of pastime are preferential for school children. The results show that the structure of leisure of different respondents' contingent has similarities and considerable differences. Few respondents (school children with "criterion behavior" – 14.9-16.0%, pupils from the high-risk group – 2.7-8.3%) are involved in the organized leisure (hobby groups, specialized sports clubs), and the majority of school children are left to themselves. Many teenagers (33.3-52.0%) from the high-risk group have little percentage of useful meaningful occupation. We have revealed the following regularity: the more often the problem of drug addiction is discussed in the teenagers' environment, the less critically young people treat it.

We have revealed a low level of interest of pupils from the "high-risk group" in going in for traditional kinds of sports, especially the ones from the school curricula. Extreme kinds of sports (boxing, wrestling, kickboxing, hand-to-hand fighting) as well as non-traditional ones are more popular among this contingent. Such kinds of sports as motor racing, parachute, mountaineering, health tourism and horseracing can be promising.

The popularity of bad habits is considerably lower among school children who go in for sports. Only some young sportsmen smoke, drink alcohol and use soft drugs. Trainers describe them mainly as unpromising ones in achieving sports goals. Unfortunately, only separate pupils from the “high-risk group” aged 11-14 go in for sports, and at the age of 15-17 they stop attending sports clubs. Specialists mark high-potential athletic abilities among pupils from the groups of risk in extreme kinds of sports. However, they also state it is difficult to attract such contingent to go in for sports.

It is necessary to prevent drug addiction by means and methods of physical culture and sports according to three stages: challenging (at the age of 11-12), forming (at the age of 13-14) and improving (at the age of 15-17).

According to our data, today the number of young drug addicts is also considerably increased by teenagers from successful groups of population, families with a high level of welfare. These are children from privileged families who mainly form a special teenagers’ subculture, whose main values include free, hedonistic pastime combined with narcotization as a specific style of life.

The data of researching 495 boys, teenagers and young men aged 11-17 allowed to reveal the age regularities of changing the indicators of morpho-functional development and physical fitness of various contingents of responders. Indicators of morpho-functional development and physical fitness of pupils with asocial behavior specifically change with age. Changes bear heterochronous and unequal character. We revealed the advantage of 11-13-years-old teenagers from the “high-risk group” according to the indicators that are analyzed. However, then it gradually decreased. It was noted that ordinary school children aged 15-17 showed the domination of levels of physical capacities development.

We characterized the structure of physical development and physical fitness of various contingents of pupils. In the majority of cases the analyzed indicators were presented separately, especially with pupils from the “high-risk group”. From two to three independent groups of indicators were revealed. Qualitative and substantial composition of indicators blocks considerably differ under the influence of age. It makes it difficult to form athletic skills and abilities, does not duly ensure the development of physical capacities and decreases the efficiency of sanitating pupils from the “high-risk group” by means of physical education.

The research developed the most important physical capacities with school children aged 11-17 from various groups in the field and track types of the school curricula.

We propose the estimation of efficiency of performing exercises based on realizing the motional potential.

We developed optimal qualitative characteristics of training loads of various directions, specified the parameters of duration and character of specific exercises, calculated the optimal levels of the work intensity, stipulated the duration and character of pauses between separate repetitions and measured the number of exercises in some structural formations for pupils from the “high-risk group.” Specific adaptation reactions occur among this contingent in relation to various types of physical loads. The specificity of adaptation appears in relation to different physical capacities.

According to the methodology of Phillips, we carried out psychological testing of the testees. We defined the general anxiety level

as well as various aspects of pupils’ anxiety that occurs from contacts with agemates before the interrelationship with teachers.

The low anxiety level was observed among 36.4% of the pupils from the “high-risk group” who went in for sports, 31.5% of pupils showed the increased anxiety level and 32.1% of the contingent had a high anxiety level. With age the share of contingent with high (from 32.1 to 50.3%) and increased (from 31.5 to 39.4%) anxiety intensively grew. The level of general anxiety was rather high with all age groups: 11–12 years old – 74.5%, 13–14 years old – 86.2% and 15–17 years old – 93.7%.

With age the number of pupils who had difficulties in interrelating with teachers considerably increased (from 44.3 to 92.7%). It convinces us in the fact that doing physical exercises and going in for sports decrease the state of anxiety and improve the psychological background of pupils.

This methodology provided high speed and accuracy of perception, contributed to the increase in the volume of the performed work, considerably increased the attention indicators and stimulated the development of mental abilities.

The experimental group showed a considerable increase in the number (the initial examination – 14.9%, the final one – 80.9%) of testees who went in for sports. Twenty-two pupils of this group started going in for combats (boxing, kickboxing) in specialized sports clubs of their schools and 16 pupils at the boxing school. The pupils from this group use their free time more efficiently.

The results of the analysis of popularity of bad habits also revealed different directionality of these indicators’ change. The number of pupils using drugs and inhaling toxic substances increased in the control group (from 24.4 to 33.3%). The tendency of the growth of smoking (from 31.1 to 42.2%) and drinking alcohol (from 48.9 to 53.3%) changed with this contingent. The number of pupils with bad habits especially related to drinking alcohol considerably decreased in the experimental group.

According to our data, positive attitude of pupils from the experimental group to fitness has been registered. The indicators related to the pupils’ interrelations between each other and with teachers have considerably improved.

Conclusions

Preventive measures are of top priority in the strategy related to reacting against illegal use and turnover of drugs. According to our data, the approach based on strengthening health – forming healthy life style – is the most promising one, because it combines personal choice and social responsibility for health. The person’s life competence is an important component of this concept. The basis of the program related to health strengthening is the development of the personality that has chosen a healthy life style of behavior. The latter not only positively influences personal welfare but also contributes to positive changes, social and cultural situation and the environment, as a whole.

The results of our research show that the commitment of young people to the form of life-sustaining activity that is alternative to drugs is most acceptable. This approach includes the actions focused on the increase in the rating of professional values, establishment of attractive image of healthy life style, development of communication skills and emotional experience, creation of favorable and interesting forms of leisure for young people and formation of positive self-esteem, personal leadership, civil responsibility and self-employment.

We think that promising areas of further research include:

- Development of pedagogical technologies for establishing “fashion” for healthy life style,
- Involving volunteering teenagers themselves in promotion of healthy life styles,
- Development of a comprehensive system related to monitoring the drug abuse situation in the teenagers’ environment,
- Specifying factors of risk,
- Organization of rising generation’s leisure,
- Estimating efficiency of the counter-drugs work,
- Development of values related to healthy life style and forming motivation on refusing from drugs,
- Development of technologies on early revealing cases of drugs use,
- Comprehensive assistance to pedagogically incompetent families, families from the “high-risk group”,
- Development of pedagogical technologies of non-traditional kinds of sports.

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