POSSIBILITIES OF ANTI-DOPING PREVENTION IN SPORTING CHILDREN AND YOUTH

Pavel Slepička, Irena Slepičková, Radka Hlaváčková, Kateřina Novotná

Charles University, Faculty of Physical Education and Sport,
José Martího 31, 162 52 Prague 6, Czech Republic

Abstract

In present overview article, we focus on some possible risk factors in child and youth sport. In an overview of contemporary research focusing on doping, and fair play, we show how the norms of contemporary competitive sport emphasizing results, maximal performance and victory at all cost may support risk behaviour in sporting children and youth, such as doping abuse, or breaking rules and fair play. It seems that this risk behaviour is not limited only to the context of sport but translates also in the life outside sport. Due to the penetration of doping substances into increasingly younger age categories, the preventive action must be targeted at sporting younger population groups whose value system is still being formed.

Key words: *sport, children, youth, doping, aggression, fair play*

1. INTRODUCTION

Children's and youth sport is a significant social phenomenon with a number of positive functions. For sporting children, sport serves as enjoyment filling up their leisure time, an activity offering a possibility of unwinding and psychic relaxation, enriching the experience sphere with intensive emotional and aesthetic experiences. Sports activity offers opportunities to establish social contacts and develop social skills. It also provides a number of options for self-realization, bringing experiences of both success and disappointment. In order to achieve sporting goals it is necessary to make efforts and overcome obstacles, which affects the sporting individuals' personality and helps to shape their value orientation.

However, this positive effect of children's and youth sport is often shaded by some serious negative phenomena linked to the society-wide environment. These phenomena, which are becoming increasingly common in children's and youth sport as well, include, above all, the tendency to use performance-enhancing substances. Thus, children's and youth sport can also represent a social microclimate enabling the development of such behavioural patterns that can be labelled as risky, both for society as a whole and for the personality development of sporting children. It is apparent that particularly performance-oriented children's and youth sport putting frequently enormous pressure on immediate success and its economic benefits creates an environment stimulating the development of such risky behaviour. Sport and its social environment are then blamed for the fact that in the name of success they often tolerate such manifestations and do not adequately cope with the tendency to use performance-enhancing substances. This creates unequal conditions for sporting individuals and sport's reputation of an activity connected with fair play principles, an activity that has been attributed a significant positive formative effect on sporting children and youth, is harmed.

These facts are alarming especially because the behavioural patterns adopted in childhood are passed on to adulthood, and, therefore, we cannot expect that some behaviour identified as risky in the above contexts will disappear by itself with gradual growing up or quitting the respective sporting environment. Sporting practice suggests that this risky behaviour is often transferred from the field of sport to everyday life and can even become a permanent part of behavioural patterns. Therefore, in the next parts of the article, we will deal with the issue of doping.

The issues of using performance-enhancing substances in children's and youth sport is becoming an increasingly serious problem, attracting the attention of various social science and medical disciplines.

They are trying to analyse these issues in terms of causes and potential psychosocial and health impacts.

In the Czech context, a lot of surveys addressing these issues, both in psychosocial and medical terms, have been conducted. A series of studies (e.g. Pyšný 1999; Slepička, Slepičková & Pyšný 1998; Slepička et al. 2000; Kabiček 2005) bring a wealth of knowledge about the causes of doping abuse, its links to the penetration of commercialization into the field of children's sport, or the effects of the social microclimate, represented primarily by parents, coaches or the school. They also present findings relating to the awareness of children and youth of doping issues, particularly the health consequences of its use, and the most important sources of this information are sought in them. In some referenced studies, efforts are made to compare the data on the use of performance-enhancing substances obtained in our conditions with the situation in some European countries. Slepička, Slepičková and Pyšný (1998) or Slepička et al. (2000) also deal with the issues of using performance-enhancing substances in recreational sport accentuating prevention and the development of preventive programmes, some of which they try to test in practice within their studies.

Ješke, Nekola and Chlumský (2002) provide statistical data obtained from the results of doping controls that can illustrate this issue. They found out that 2% of doping tests detecting the use of prohibited substances in different sports were positive. This study, even though survey in adult performance-oriented athletes, is also relevant in the context of doping issues in sporting youth, as the situation in top-performance sport is reflected in youth sport as well. Successful top-performance athletes become models for sporting youth encouraging thus the tendency to follow the paths that led to their success. This may be particularly evident in situations where the requirements for success coming from the closest social environment cannot be met through common training means.

The situation in recreational sport is mapped e.g. in the study by Pyšný (2005) focusing on youth, especially boys attending fitness clubs. He revealed a strong tendency to use performance-enhancing substances to accelerate the growth of muscle weight in "body building". The main reasons for taking these substances stated were the social environment of fitness clubs with their potential offer of performance-enhancing substances and the tolerance for their use by other fitness club clients of similar age. The need for recognition, positive feedback from peers in combination with a feeling of physical inadequacy also played an important role there.

The relevance of the issues of doping in the Europe-wide context was reflected by the drafting of the European Anti-Doping Convention, which stimulated research into children's and youth sport doping in the international context. A number of studies have been conducted to analyse this phenomenon from many different perspectives. Yesalis and Bahrke (2000), for example conducted a meta-analysis of international studies focusing on this area and state that 3 to 12% of adolescent boys and 1 to 2% of adolescent girls occasionally use prohibited performance-enhancing doping agents. Kindlundh et al. (1998) surveying the Swedish youth population state that 2.7% of boys and 0.4% of girls have sometimes used doping agents. An even higher percentage of the respondents said that they knew how to obtain such agents even though they had not used them yet.

In addition to studies focusing on the use of doping, other authors concentrated on research into young people's knowledge of doping issues and their attitudes towards its use. Sas-Nowosielski (2006) found out that more than half of the youth participating in her study lacked even elementary information on the effects of doping agents, nevertheless, 10% of the boys and 2% of the girls admitted taking doping agents. The above studies illustrate the relevance of the issues of risky behaviour of sporting youth manifested by using various doping agents in an international context. For this reason, many studies have also investigated the issues of motivation for such behaviour among sporting youth. Kindlundh et al. (1999), for example, quote the need to improve one's physical appearance and increase their sports performance as one of the strongest motives for adolescents.

The results of a study by Kanayama, Hudson and Pope (2008) confirms the occurrence of users of performance-enhancing substances in recreational sport as well, where the main motive is usually the need to improve the physical appearance so that it corresponds to the current (fashion) requirements. The authors also mention the harmful effects of doping during the adolescence period resulting in the

appearance of circulatory system, neurological and psychological disorders in later years. Similar conclusions were drawn in the above cited Sas-Nowosielski's study presenting the most important motives of doping as "change my body", build muscle size, change the body mass index, build muscle strength. Although most of the respondents were worried about side effects such as acne, hair loss, depression, they still continued to use doping, especially anabolic steroids, paradoxically to improve their physical appearance.

A comparative study conducted in 11 European countries (DeKnop et al. 1996) concludes that sport, including children's and youth sport, increasingly emphasizes competitiveness and results, with victory having a growing social and economic significance. These facts indicate that in performance-oriented sport, the tendency to violate standards and the related tendency to use doping agents to win is becoming an increasingly common phenomenon penetrating into children's and youth sport. Similar conclusions were reached by the study by Ehrborg and Rosen (2009) who argue that the main motive for using doping is to improve the physical functions necessary for performance in line with the psychological pressure to succeed and the economic reward. Here, the "victory at all costs" approach, often represented by the closest social environment, especially in connection with the motivational orientation towards performance and success among the young athletes themselves, also plays an important role (Petroczi 2007, 2009).

The influence of a wider social environment can also be observed (Kindlundh et al. 1999), particularly tolerance for breaching social standards in combination with peer pressure. He found out that power training, family problems and truancy are related to the likelihood of using doping. Taking other drugs (marijuana, amphetamines, opiates) also signal potential use of doping substances. The authors emphasize that the use of doping involves more than just an effort to improve one's physical performance, but is also related to alcohol abuse, smoking and the use of psychotropic substances.

If we study the psychological factors affecting the use of doping, numerous studies devoted to this issue can be mentioned (Kindlundh et al. 2001; Laure & Bissinger 2007; Zelli, Malia & Lucidi 2010). They mention such factors as school achievements, perceived status, self-confidence, low self-esteem, anxiosity, quality of internal standards and values. The use of doping has been particularly associated with low self-esteem, depressions (including suicidal tendencies) and very little knowledge of the health implications of doping. In addition, intensive participation in such sports activities where muscle strength, body weight and shape were emphasized, combined with a positive parents' attitude towards these characteristics, were also of key importance.

The results of the presented studies imply that it is primarily the social environment that is responsible for the occurrence of risky behaviour, under which the use of doping substances by sporting youth also falls. It is, above all, a wider social environment with orientation towards performance and its economic benefits resulting from the commercialization of sport, but also the micro-social environment, be it parents, coaches or peers, that transfers these demands onto sporting individuals and thus increases their psychological burden. Low awareness on the part of potential users of the long-term effects of using drugs, and often considerable tolerance for the issues of taking different drugs across society, all this makes this issue still more relevant.

The above mentioned facts suggest the necessity of preventive antidoping programmes that will bring both knowledge and information about doping, but will also use the positive influence of peers and offer alternative models of resistant behaviour to potential negative situational effects of the sporting environment.

2. POSSIBILITIES OF ANTIDOPING PREVENTION

Considering the possibilities of antidoping prevention it must be stated again that a closer study of the issue of doping reveals similar psychological patterns as e.g. in drug addiction or gambling (pathological playing games). In all these phenomena, compulsive urgency to continue an action leading to some satisfaction, frequently despite serious health-related or social background

consequences, can be observed. Another characteristic feature is the inability to interrupt this behavioural pattern and, if interrupted, the tendency to resume the original action in a certain situation.

The above facts imply that as soon as any performance-enhancing substances are used on a regular basis, there is a risk of an addiction. Once acquired, the addiction is very difficult to get rid of, and, therefore, the best way of avoiding the use of such substances is systematic prevention.

The antidoping prevention concept may be based on the above mentioned European Anti-Doping Convention, adopted by the majority of European states. In the Czech Republic, the solution of doping issues is formally supported by the "Anti-Doping Charter". By signing the Charter, sports organisations and other institutions providing sporting activity have obliged to act against doping in the spirit of international agreements and their own antidoping regulations. These are, above all, legislative, administrative, organisational recommendations, which should be regularly put into practice in the cooperation of state administration and all associations engaged in sport.

Despite the existence of international agreements, legislative and other measures, systematic prevention is still the exception rather than the rule, which may also be due to the difficult implementation and, frequently, low effectiveness of the attempts at more systematic prevention, mainly in top-performance sport, made to-date.

A successful preventive programme must be complex, aiming at certain aspects of the human psyche, the social environment of the respective group in the population. It should respect the basic causes of this phenomenon as they were presented in individual parts of this text. Performance-enhancing substances on their own are neither bad nor good, they simply exist. Drugs in general and doping in sport are, by their effect, very intensive and very dangerous for people, athletes, mainly because they do not have a corresponding "philosophy", a value system, forming a natural protective or preventive mechanism against such perceptions, experience, effects.

This context also includes the steps taken by state administration resulting in legislative measures, prohibiting offering anabolic steroids to young people less than 18 years of age for other than medical reasons. The measure primarily aims at the most vulnerable part of the population and belongs to preventive measures banning the access of young people to a certain group of performance-enhancing substances.

Despite the undoubtedly positive contribution of administrative measures to the prevention of doping, one cannot rely solely on administrative measures in an effort to limit its use in sport without links to other social spheres. It is becoming evident that preventive programmes focusing on youth should, in the case of doping, provide factual information on the effects of doping substances, including information on how safe or dangerous these substances are mainly for health. The implemented programmes should search for natural alternatives to the experiences leading to taking performance-enhancing substances. It is necessary to design practical exercises, situations that would entail a feeling of choice and personal responsibility for the choice forming thus a basis for decision making in risk situations.

The most effective prevention, naturally, is the creation of such a social environment where victory has got a value of enjoyment on its own and it is not primarily an economic value. Despite the rather pessimistic predictions about the possibilities of affecting the occurrence of doping in sport due to its intensive commercialization, the most promising way is the creation of a functioning system of preventive influence on sporting children and young people. Only a systematically and from childhood long-term influenced individual is more likely to resist the pressure of commercialization in adulthood regardless of the fact what means were used for this purpose.

The necessary parts of this system of prevention are above all:

a) harmonisation of the demands of the social environment with the sporting individual's potential,

b) presentation of such models, famous personalities, athletes whose behaviour is socially acceptable,

c) influencing teachers, coaches, parents to present such values and standards to sporting youth that are in harmony with moral, ethical principles of fair play.

3. PREVENTIVE PROGRAMMES

Together with generally functioning restrictive systems, the negative consequences of using doping have led to an effort to prevent this problem. Preventive efforts are primarily aimed at sporting young people whose value system is still being formed. Due to the penetration of doping substances into increasingly younger age categories, the preventive action is targeted at increasingly younger population groups. Therefore, preventive programmes are implemented already at the primary school level. Together with the growing significance of drug and doping issues, preventive methods of avoiding or, at least, limiting their consequences have been gradually developed and verified in the Czech Republic as well. Some programmes were implemented within a Europe-wide context (Europack), while others were tailored to fit specific conditions of the Czech Republic and verified within long-term studies.

Three levels of preventive action are generally distinguished:

a) Primary prevention, which focuses on the creation of the right life style as a precondition for preventing in appropriate life habits. It does not refer to the external presentation of "correct behaviour" only. Individuals identify with this behaviour; it is in harmony with their value orientation and is highly stable in relation to external effects. It is evident that primary prevention is a matter of long-term education, both in the family and at school.

b) Secondary prevention comes at the moment when problems with using performance-enhancing substances start to arise. Here, we are facing a demanding task to attempt to change an already created value orientation rather than create a value orientation within primary prevention. Changing people's thinking, behaviour and acts, however, is a highly demanding, long-term and, frequently, not very effective process. Its starting point is the understanding of the causes which lead to using doping, the analysis of related, both health and social problems, and an effort to solve these problems and mitigate the resulting difficulties.

c) Tertiary prevention comes at the moment when the problems have reached a severe state, both in terms of physical and mental health. Here, we are facing pathological states whose treatment is a matter of specialised workplaces dealing with the treatment of already developed addictions to different substances.

Besides the above classification of preventive programmes, prevention is also classified as specific and non-specific prevention. Specific prevention programmes are mostly based on affecting the cognitive (intellectual) features of individuals. Specific prevention mainly draws on information about all aspects of a given phenomenon. Children and young people are provided with all available information on doping, are presented wider social contexts and potential negative health consequences. The question of how much they will identify with this information and apply it subsequently in their own sporting practice, however, remains an open issue.

Non-specific prevention of doping consists in the offer of such activities which minimize the option of being offered doping substances. The effort is to perform such sporting activities and in such a social environment which shows possibilities of reaching positive experiences, contentment in life, solving problems by other means than through performance-enhancing substances. The offered activities, however, must be attractive for children and young people, must saturate their emotional and social needs and fill up their leisure time.

Preventive programmes targeted at sporting children and youth can be generally divided into five groups:

a) Programmes offering only knowledge and information. Such programmes mainly rely on various information leaflets and brochures handed out on different occasions. Unless accompanied by other activities, these programmes only have little effectiveness in reducing the risks of using performance-enhancing substances.

b) Programmes oriented towards a change in behaviour, accentuating personal and social growth, awareness of values and evaluation of personal feelings. They again primarily act on intellectual

personality aspects where a behaviour change is attempted via affecting opinions and attitudes. It is, however, becoming apparent that a mere change in opinions does not guarantee a change in behaviour. For illustration, the existence of an opinion on the health risks of anabolic steroids does not mean that the supporters of this opinion will not use anabolic steroids in certain situations themselves.

c) Programmes combining gaining knowledge of a certain phenomenon (doping) with an effort to change behaviour. They are based on the assumption that presented knowledge, together with instructions of how to avoid some risks, can become part of acquired behavioural patterns. Then, individuals should be guided by these behavioural patterns even in non-standard, stressful situations.

d) Programmes combining a positive influence of peers (peer programmes) with the training of special skills, behaviour patterns. These programmes show a relatively high effectiveness as they mainly use the stimulating influence of peers based on the principle of conformity. Information transfer, communication via peers is also used, decision making processes are affected by the evaluation of all information available. The effort is to incorporate some information into the evaluation processes, affect the creation of the value system of the young generation.

e) Programmes offering alternatives to using performance-enhancing substances and stressing the acquisition of specific skills allowing reaching social recognition. These programmes are mainly used in the prevention of drug abuse in common school population where particularly emotionally attractive leisure time activities allowing experiencing adventure via motor activity are offered. It is becoming evident that these types of programmes have positive effects on at-risk youth populations.

Some of the above principles of creating programmes leading to enhancing their effectiveness were verified in repeated research studies conducted among the Czech population as well. The studies pointed out the basic persisting problem of prevention, which is the specification of the means through which it can be implemented. They also stressed the possibility of creating a universal antidoping programme which would be effective for the entire sporting population.

It is, in particular, the specificities of top-performance sport, performance-oriented individuals that requires a specific approach, different from the approach to the other population groups practising sport in leisure time. Moreover, there is a system of antidoping control and repression in top-performance sport, which can have some preventive effect. Recreational sport where performance-enhancing substances have been intensively penetrating, too, however, does not have a similar system and, it is probably not possible to create it either.

Despite the above problems, it is evident that some changes can be achieved mainly in young people. By combining different approaches which do not merely involve communicating information, the opinions on doping have changed more easily than the tendency to use doping. Comparing the effectiveness of the used programmes, a higher effectiveness of emotionally targeted programmes was manifested.

The programmes which combined information with emotional experiences initiated changes in attitudes which persisted for a long time. The condition for enhancing the effectiveness of preventive programmes is their systematic nature and long-term influence on young people. Short-term, episodic influence offers hardly any prospects.

There is a difference in opinion on the issues of doping among sporting and non-sporting youth. Therefore, the means used in prevention must be differentiated with a view to the involvement of young people in sport where a specific group is represented by the youth participating in sports competitions, which is most affected by the commercialization climate dominating in top-performance sport.

The means used in preventive programmes show different effectiveness; the advantage of printed materials, for example, is the logical order of presented information. Audio-visual means are more

attractive for young people producing a greater immediate emotional response resulting from the observed action.

In terms of the environment in which preventive programmes can be implemented, a "neutral" school environment appears to be suitable. This is the environment through which all youth population is passing. Moreover, the school environment is not directly affected by the commercialization pressure with direct links to performance. Apart from schools, youth sports clubs must be used, particularly in the case of individuals practising competitive sport, and the family environment. The condition for an effective impact in this environment is sufficient knowledge of the issues of doping on the part of youth coaches, parents and PE teachers and the necessary coordination during this prevention.

4. CONCLUSION

The above mentioned facts suggest the necessity of preventive antidoping programmes that will bring both knowledge and information about doping, but will also use the positive influence of peers and offer alternative models of resistant behaviour. It appears that general moral attitudes may be, in some respects, more significant than attitudes specifically related to doping, which should also be considered in anti-doping interventions. To conclude, the principles and recommendations resulting from already implemented preventive programmes can be summed up.

a) Antidoping prevention is a long-term process whose results will only come out within a longer time horizon, depending on the society-wide climate in which the prevention takes place.

b) As revealed by domestic and international experience and findings, antidoping prevention covers a wide scope of mainly youth population and can, to a considerable extent, help to prevent or mitigate this phenomenon which, however, is often deeply rooted in society-wide problems.

c) For practical use, it is desirable to constantly alternate the means used in preventive programmes as a stereotype discourages children and youth. It is desirable to use audio-visual means for information as they are more attractive for a wider age range of the population.

d) The disseminators of antidoping prevention should be, in the first place, physical education teachers, youth coaches and the parents of young people practising competitive sports, who form the closest social environment with the greatest informal influence on the sporting youth.

e) An integral system of antidoping prevention cannot be created without the coordination of antidoping prevention, foundation of consultation centres for larger catchment areas in which sports schools or sports classes are established, prevention not respecting this will not be very effective.

f) Only systematic antidoping prevention can, to some extent, compensate for the missing natural corrective mechanisms (adequate social integration of individuals, positive effect of a social environment, adequate demands set on individuals) which would otherwise act as a natural obstacle to the negative social phenomena to which doping undoubtedly belongs.

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