



MARTIAL ARTS AND DOPING (THE CASE OF SAMBO)

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Abstract

Background. Today, the problem of doping is the most well-known negative phenomenon in modern sport, which has become widespread in response to its active commercialization. The majority of people would agree that doping issue has moral and ethical basis, therefore the educational component of anti-doping policies is most promising in achieving the desired result – doping-free sport.

Research purpose. The study was aimed to investigate the peculiarities of the ideas sambo athletes may have about the problem of doping in modern sport.

Materials and methods. The study involved 97 highly professional sambo athletes from 21 countries, namely Russia, Ukraine, Mexico, Japan, the USA, Canada, Cuba, Guatemala, Republic of Korea, Colombia, Paraguay, Venezuela, Peru, Brazil, Nicaragua, El Salvador, Dominican Republic, Puerto Rico, Honduras, Uruguay, and Costa Rica.

Results. A survey conducted among the professional sambo athletes, participants of the 2018 World Cup, made it possible to establish their knowledge about and their attitude to doping. It became known that 76.29% of the athletes were well familiar with the doping control procedure, while 23.71% were not. At the same time, 78.35% of the respondents believed that they knew their rights and responsibilities during the doping control procedure, and 21.65% of the athletes did not. 77.32% of the respondents knew the organizer of doping control and 22.68% did not.

Conclusions. The analysis of the study results and WADA statistics give grounds to state that the problem of doping in modern athletes remains an urgent problem in professional sports, including sambo.

Keywords: anti-doping education, sambo athletes, doping.

Introduction

The history of the ancient Greek Olympic Movement shows that the doping problem was relevant during the ancient Games. In the II century BC Greek athletes ate sesame seeds and psychotropic mushrooms before competitions. It is known that wrestlers rubbed their bodies with oil rendering it difficult for rivals to take hold of each other. In the V century BC Roman gladiators also used stimulants to block fatigue and pain. And in the Middle Ages Scandinavian warriors ate the fly agaric infusion, which increased

aggression and blocked fatigue and pain (Morente-Sanchez et al., 2013; Wagner et al., 2014; Geeraets, 2018).

The active modern sport development and the expansion of its geographical and social areas have contributed to a number of problems and negative phenomena, namely: doping use by athletes, sport politicization and commercialization, etc. These aspects cause modern Olympic movement vulnerability, as they do not correspond to the ideas and values of Olympism, according to which all sports are trying to develop. In this regard, the doping, ecology, politics issues have been repeatedly discussed at international conferences and IOC, IOA, UNESCO, UN, Greenpeace events (FIAS, 2018). The problem of doping today is the most well-known negative phenomenon of modern sport, which has become widespread under the conditions of its active commercialization (Barabanova, 2010; Platonov, 2016; Geeraets, 2018).

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The active doping scandals growth has necessitated the IOC to hold meetings, sessions and conferences on this issue. The largest event was the Lausanne Conference (February 2-4, 1999), attended by more than 600 delegates. It resulted in the Lausanne Declaration on Doping in Sport, which contains six sections, namely: "Education, prevention and rights of athletes"; "Olympic Movement Anti-Doping Code"; "Sanctions"; International Independent Anti-Doping Agency; "Responsibility of the IOC, International Sports Federations (IFS) and the Court of Arbitration for Sport"; "Cooperation of the Olympic Movement with NGOs" (FIAS, 2018).

The purpose of the research is to study sambo athletes' ideas peculiarities of doping problem in modern sports.

Materials and methods

Participants of the research

The article presents the survey results of athletes participating in the World Sambo Championship in Bucharest (Romania) in 2018.

The survey involved 97 highly professional athletes from 21 countries, namely: Russia, Ukraine, Mexico, Japan, USA, Canada, Cuba, Guatemala, Republic of Korea, Colombia, Paraguay, Venezuela, Peru, Brazil, Nicaragua, El Salvador, Dominican Republic, Puerto Rico, Honduras, Uruguay, Costa Rica.

This study was conducted with the support of the Medical and Anti-Doping Commission of the International Sambo Federation (FIAS).

Research organization

In order to ensure the maximum obtained data reliability, athletes were asked to fill out a questionnaire anonymously.

The main questionnaire items were formed at the International Seminar for Young Scientists of the International Olympic Academy (IOA) in Olympia (Greece) in 2015. Also, some questionnaire items were improved and adapted for sambo by FIAS Medical and Anti-Doping Commission members in 2018.

The questionnaire contains three questions blocks (Table 1). The first block contains 15 questions with 2 answers types ("yes" and "no"). The other block contains 6 questions with 5 answer options, in particular: fully agree, agree, neutral, disagree, completely disagree. The last block contains only one question with 5 already formulated possible answers.

It should be noted that of the three proposed questions blocks, respondents answered the first block questions in the best way, although sometimes had difficulties with some questions and did not answer them.

Statistical analysis

Descriptive analysis methods were used, including tabular representation of individual variables, calculation of arithmetic mean (M) and standard deviation (s).

Results

WADA and the International Sports Federations annually conduct doping control, increasing tests number. However we can see that these measures are not enough to

Table 1. The structure of the survey of athletes

List of questionnaire questions	
The first block of questions	
1.	Do you know anything about the list of banned WADA drugs?
2.	Are you familiar with the doping control procedure?
3.	From what sources did you receive information about doping control?
4.	Have you received information about doping control from the International and National Sambo Federation?
5.	Do you know the organizers of doping control?
6.	Do you know your rights and responsibilities in the doping control procedure?
7.	Have you been doped?
8.	Have you used banned substances and methods?
9.	Have you participated in anti-doping educational activities?
10.	From whom did you receive information about doping measures?
11.	Have you been a member of an internationally or nationally registered group of athletes "for out-of-competition doping"?
12.	Should athletes be required to participate in doping education activities?
13.	Have you been encouraged to use doping substances and who?
14.	Do you know about the negative effects of doping substances on the body?
15.	Do you share the opinion about the legalization of doping?
The second block of questions	
1.	Do you know anything about the list of banned WADA drugs?
2.	Are you familiar with the doping control procedure?
3.	From what sources did you receive information about doping control?
4.	Do you have enough information on doping control?
5.	Do you know the organizers of doping control?
6.	Do you know your rights and responsibilities in the doping control procedure?
The third block of questions	
1.	What are your actions if you became aware of doping by other athletes?
a)	I ignore the information received
b)	tell the athlete about the dangers of doping for health
c)	inform the coach
d)	pass the information to the doping officer
e)	I will ask about the effectiveness of doping to use it as well.

reduce the number of cases of using doping by athletes, not even mentioning the complete problem overcoming. This is evidenced in particular by WADA official statistics, which reflects the positive samples dynamics in sambo whreslers. In the period from 2015 to 2020, the largest positive samples number was observed in 2016, while the largest tested whreslers' number was in 2019 (Table 2).

Obviously, it is almost impossible to overcome the doping phenomenon in Olympic sports due to its total commercialization and current trends in pharmacology and genetic engineering. We assume that this phenomenon can be minimized. The anti-doping procedure should be based on comprehensive, systematic and specific educational activities, which is confirmed by our previous studies (Oliinyk et al., 2014).

Currently, sambo is a particularly popular sport in Ukraine. Analyzing the achievements of Ukrainian sambo wrestlers at the World and European Championships, we

Table 2. WADA statistics on doping testing in sambo (2015-2020)

Testing and sanctions	Years					
	2015	2016	2017	2018	2019	2020
In-competition testing	171	177	183	184	243	70
Out-of-competition testing	40	28	18	29	35	25
Therapeutic use exemption (TUE)	1	2	0	0	0	0
Adverse and atypical findings (AAF)	7	15	4	5	10	Specified
Anti-Doping Rule Violations (ADRV)	7	15	4	5	11	Specified

Table 3. The total number of medals won by Ukrainian sambo wrestlers of all ages at the World Championships, Europe, European Cups and European Games (2015-2020)

Year	Bronze medals	Silver medals	Gold medals	The total number of medals per year	Team rank, FIAS
2015	27	28	26	111	II
2016	83	39	23	145	II
2017	60	48	19	127	II
2018	74	54	39	167	II
2019	62	37	35	134	II
2020	40	26	15	81	II

can conclude that Ukraine takes one of the leading world positions, constantly competing for the championship with the country-founder of this sport the Russian Federation. According to the unofficial record of FIAS 2015-2020, the Ukrainian National Sambo Team by total number of medals, won during the year, consistently occupies the second team place (Table 3).

This confirms sambo popularity in Ukraine and great human resources capacity in this sport. Worthy competition is also made by the national teams of Bulgaria, Uzbekistan, France, Georgia, Tajikistan, Mongolia, Romania, Spain, Italy and others.

It is obvious that gaining popularity in Ukraine and the world this type of wrestling becomes vulnerable to such negative professional sports phenomena as doping.

A survey conducted among professional sambo athletes, participants of the 2018 World Cup, allowed to establish the knowledge level and their attitude to doping.

Table 4. The survey results of professional sambo athletes attitude to doping use in sports, %

Question	Answer options				
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Doping are using in sambo	10.31±2.53	30.93±4.15	31.96±3.82	9.28±1.57	17.53±2.03
Doping is a problem in every sport	48.45±5.12	37.11±3.48	7.22±0.97	2.06±0.05	5.15±0.87
Doping affects world records	30.93±4.53	40.21±5.01	11.34±1.27	10.31±2.41	7.22±0.98
Doping should not be prohibited	6.19±0.56	3.09±0.09	5.15±0.86	16.49±2.09	69.07±6.55
All highly qualified athletes use doping	-	2.06±0.08	22.68±2.89	37.11±3.98	38.14±3.67
Doping is a remedy helping in training process	6.19±0.59	7.22±0.96	32.99±4.58	26.80±3.07	26.80±3.18

The first questions block

Do you know anything about the list of WADA banned drugs? Only 79.38% of respondents answered "Yes" and 20.62% answered "No". 82.47% of respondents point that they were acquainted with the WADA list in their country, while 17.53% did not receive such information in their country. In general, 84.54% of respondents indicate that they receive enough information from sports federations in their country, while 15.46% believe that such information is not enough for them. It was found that 61.86% of the respondents underwent doping control at competitions and 38.14% did not. Interestingly, only 23.71% vs. 76.29% were members of an internationally or nationally registered group of athletes for doping outside the competition.

It became known that 76.29% of athletes are well acquainted with the doping control procedure, while 23.71% do not. At the same time, 78.35% of respondents believe that they know their rights and responsibilities in doping control procedure, and 21.65% of athletes do not know. 77.32% of respondents know the organizer of doping control and 22.68% do not.

Interestingly, 57.73% of surveyed athletes participated in anti-doping education symposia or seminars, while 42.27% didn't participate in such events. At the same time it was found that 50.52% of respondents received information about anti-doping seminars or other similar events from their national federation and 49.48% did not receive such information.

It should be noted that 91.75% of athletes believe that anti-doping education should be mandatory for professional athletes, while 8.25% do not share their opinion. Thus, 81.44% believe that anti-doping education implementation will reduce the use of doping by athletes and 18.56% do not share this opinion.

It was found that 11.34% of athletes were encouraged to use doping substances by other team members, but the majority (88.66%) did not have such an effect. It is worth noting

that 6.19% of athletes were proposed to use doping by their coaches. It should be noted that 93.81% of athletes are well aware of doping effects on the body.

The second questions block was aimed at determining the attitude to certain doping use problems by athletes. The results are given in Table 4.

The open question, offered to athletes with already formed answers, was reflected in the following results.

Asking the athlete "If your fellow athlete uses doping, how will you do?", We obtained the following answers, namely: 18.56% ignore this fact, 46.39% will tell a friend about doping dangers and health risks, 29.90% of respondents tell the coach about it, 3.09% will tell the doping officer about it and 2.06% of athletes will ask about the doping effectiveness in order to use it too.

Discussion

Analysis of research results, scientific literature (Barabanova, 2010; Halabchi, 2009; Mottram, 2018) and WADA statistics (WADA, 2010, 2015) suggest that the problem of doping by modern athletes continues to be a pressing problem in Olympic sports and sambo in particular.

It was found that highly qualified sambo athletes are mostly familiar with the list of banned substances and WADA methods. At the same time, they are aware of their rights and responsibilities in the doping control procedure (Bloodworth et al., 2012; Morente-Sanchez et al., 2013). At the same time, according to the survey and data from special literature (Backhouse, 2011; Wagner et al., 2014), athletes are aware of the negative effects of doping on the body and receive sufficient information on these issues from their national federations (Oliynyk et al., 2014) and WADA Centers (WADA, 2015; Van Bottenburg Maarten, 2021). The question arises, why measures to prevent the use of doping substances are not able to overcome this detrimental phenomenon for both athletes and sports? First, it is the excessive commercialization of sports (for winning an athlete receives a significant financial reward). Secondly, sports victories at major international sports competitions increase the prestige of the state. Third, the winning athlete becomes a national hero, his victory in major competitions becomes the meaning of his life ambitions. This view is fully shared by other researchers of the problem of doping in sport (Johnson, 2012; Ivanova et al., 2012; Faria, 2018).

International and national sambo federations are educating about doping among both coaches and athletes (McNamee, 201; Wagner et al., 2014)

To this end, appropriate programs have been developed, including in Ukraine (Oliynyk et al., 2014). However, according to the results, a significant number of athletes are tolerant of doping.

Apparently, this is due to the fact that some experts are in favor of legalizing doping (Coleman et al., 2011). At the same time, the data obtained indicate that this largely depends on the coaches. After all, they must be aware that modern research on the physiology of sports proves that there are unused reserves in sports training. They allow athletes to show record results without the use of doping (Loland et al., 2012; Petróczy et al., 2017).

The survey found that 91.75% of athletes are in favor of making anti-doping education compulsory in the training

system. According to researchers of this problem (Drozd et al., 1998; Kornbeck, 2013; Mottram, 2018), this will reduce the use of doping by athletes.

Against the background of increasing doping substance use, including among martial arts athletes, scandals with doping test results in a large number of well-known athletes encourage the search for effective approaches to minimize this phenomenon (Thomas, 2017, Geeraets, 2018).

We believe, like other researchers (WADA, 2010; Johnson, 2012; Motoarca, 2015), that the doping education paradigm should be based on a set of ideals, traditions, ethical norms, taboos, ie a set of values based on on the spiritual and moral attitudes of the past and present of sport.

Conclusions

Analysis of research results and WADA statistics give reason to believe that the problem of doping by modern athletes continues to be an urgent problem of professional sports and sambo in particular.

It is established that highly qualified athletes are mainly acquainted with the list of prohibited substances and WADA methods. At the same time, they are aware of their rights and responsibilities in doping control procedure. Athletes are aware of the negative doping effects on the body and receive sufficient information on these issues from their national federations and WADA centers.

It was found that 7.22% of sambo athletes were offered doping drugs by coaches, and 11.34% of their team members were inclined to use doping. At the same time, a significant number of sambo athletes are convinced that doping is used in sambo and that it is a problem in all sports. Sambo athletes are also convinced that doping affects world records.

The majority of sambo athletes (91.75%) consider anti-doping education an important component of training and competitive activities, and 81.44% are convinced that anti-doping education will reduce the doping use by athletes.

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Conflict of interest

Authors state that there is no conflict of interest

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БОЙОВІ МИСТЕЦТВА ТА ДОПІНГ (НА ПРИКЛАДІ САМБО)

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Авторський вклад: А – дизайн дослідження; В – збір даних; С – статаналіз; D – підготовка рукопису; Е – збір коштів

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Передумови і мета дослідження. Проблема допінгу сьогодні є найбільш відомим негативним явищем сучасного спорту, яке набуло поширення в умовах його активної комерціалізації. Більшість спеціалістів погодиться, що питання допінгу має морально-етичну основу, тому освітня складова антидопінгової політики є найбільш перспективною для досягнення бажаного результату – спорту без допінгу.

Метою дослідження було вивчити особливості явлення спортсменів – самбістів про проблему допінгу у сучасному спорті.

Матеріал і методи. В анкетуванні взяли участь 97 високопрофесійних атлетів з 21 країни світу, а саме: Росія, Україна, Мексика, Японія, США, Канада, Куба, Гватемала, Республіка Корея, Колумбія, Парагвай, Венесуела, Перу, Бразилія, Нікарагуа, Сальвадор, Домініканська Республіка, Пуерто Ріко, Гондурас, Уругвай, Коста Ріка.

Результати. Проведене анкетування серед професійних спортсменів самбо, учасників Чемпіонату світу 2018 дали змогу встановити рівень знань та їх ставлення до вживання допінгу. Стало відомо, що 76% спортсменів добре знайомі з процедурою допінг контролю, тоді як 24% вона не відома. Водночас, 78% опитаних вважають що їм відомі їх права і обов'язки під час процедури допінг контролю, і 21% спортсменів про них не знають. Для 77% опитаних відомо хто є організатором допінг контролю і 23% цього не знають.

Висновок. Аналіз результатів досліджень та статистики ВАДА, дають підстави стверджувати, що проблема вживання допінгу сучасними атлетами продовжує бути актуальною проблемою професійного спорту і самбо зокрема.

Ключові слова: антидопінгова освіта, самбо, допінг.

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