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“Awarness of sport related people about antidoping rules in Azerbaijan”

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CONTENTS

List of abbreviations

IOC – International Olympic Committee

WADA – World Anti-Doping Agency

AMADA – Azerbaijan National Doping Agency

ASAPES – Azerbaijan State Academy for Physical Education and Sport

MC – Medical Comission

IAAF – International Association of Athletics Federations

IF – International Federation

IAAF-MC – International Association of Athletics Federations Medical Comissio

UNESCO – United Nations Educational, Scientific and Cultural Organization

RADO – Regional Anti-Doping Organizations

NADO – National Anti-Doping Organizations

TUE – Therapeutic Use Exemptions

OTC – Over-the-counter

ASP – Athlete Support Personnel

AAS – Anabolic–Androgenic Steroids

PES – Performance-enhancing substance

INTRODUCTION

Possession of medals at the Olympic Games has always been considered the most prestigious demonstration of an athlete and the source of his fame in the country. This led to the fact that athletes themselves or at the insistence of trainers deliberately took doping substances that stimulate physical performance and mental activity in order to increase their results without taking into account the athlete's health risks and the IOC rules prohibiting the use of such substances.

As a result of increasing international efforts to counter the effects of sports-enhancing drugs, at the end of 1999, the IOC established the World Anti-Doping Agency (WADA) to test athletes at the upcoming Olympic Games and raise standards for doping testing. [1] Reforms in the field of literacy of athletes in various sports are undeniable, given the studies under the auspices of WADA, but despite this, lack of awareness and awareness of athletes about doping control is currently one of the central problems of modern sports, since the use of doping by athletes not only causes damage their health, but also undermines the basics of sports. The lack of awareness of not only athletes, but also support and other sports personnel makes it difficult to fight in the world. On this occasion, studies are being conducted in different countries of the world that are aimed at studying the awareness of athletes and support staff about anti-doping rules.

In recent years, our country has achieved very great success in the sports field in the international arena. At the same time, Azerbaijan is one of the countries fighting for fair sport.

Through the efforts of the AMADA agency, anti-doping rules have been adopted and implemented in accordance with the WADA World Anti-Doping Code. as part of the fight for fair sports, the national agency periodically holds educational anti-doping seminars and trainings to improve the literacy of athletes and support staff in the field of anti-doping. The idea of our study was to study the effectiveness of measures taken in the country in this direction by conducting a survey using a specially designed questionnaire.

CHAPTER I.

LITERATURE REVIEW

1.1. History of the Anti-Doping Movement

Sport has always occupied a significant place in society, characterized by high entertainment, intense rivalry, emotionality, the beauty of movements and diverse aesthetic content. It has attracted the attention of spectators and fans since ancient times.

Historians believe that the use of doping during the Olympic Games began from the very day of competition in 776 BC. Participants in the Games took hallucinogenic and analgesic extracts from mushrooms, various herbs and wine. By the time of the first modern Olympic Games in 1896, athletes had a wide range of pharmacological support, from codeine to strychnine (which is a powerful stimulant in near-fatal doses). [1] In modern sports, the use of drugs and methods that improve results is considered as “doping” - a term that was supposedly first used in the 1889 English dictionary. Doping has been described as an opium-containing substance used to stimulate the physical performance of horses. The word "doping" originated in the South African Boer language, in which "doping" meant an extract of stimulating effect. [1] Olympic authorities have long suspected that some athletes used various drugs - blood thinners, steroids, amphetamines. But it was amphetamines that caused the very first doping incidents in sports, which significantly increased the athlete's stamina due to the reserve forces of the body. This was connected with amphetamines in the case of the death of the cyclist Knud Jensen at the 1960 Rome Olympics, and finally provoked a response to the race. It was amphetamines that made the press and the masses horrified and resented by doping.

And in the end, in response to his death at the Olympics in Rome in 1960, the IOC forms a medical committee in 1961. But, despite this, the use of anabolic steroids has so far been widespread. And already at the next Olympics, held in Tokyo in 1964, athletes began to be checked for their doping. True, this did not produce fruit, since methods for guaranteed detection of certain substances in the human body have not yet been developed. [2]

Doping control of athletes for drug use began at the Olympic Games in Mexico City, released in 1968, after the first television death of 29-year-old English cyclist Tom Simpson in 1967 (an autopsy showed a high level of methamphetamine in his system) during the 13th round of the Tour de France, doping control and the continuing death of

athletes, they used prohibited substances for their own purposes. At the 1967 IOC session in Tehran, MC presented a proposal that mainly consisted of a list of prohibited substances (sympathomimetic amines, central nervous system stimulants, drugs, antidepressants and major tranquilizers) and the rules for testing these substances at the Olympic Games. [3]

The IAAF was the first IF to take action by creating the MC at its 1972 Congress in Munich. At that time, the list of banned substances provided by the IOC did not include anabolic steroids. The IAAF-MS resolutely faced the doping problem and soon became the leading international sports authority in the fight against doping. Over the years, as drugs like human growth hormone, amphetamines, anabolic steroids, testosterone have been developed, new names have been added to the list of banned substances. [6]

After some campaigns, the IAAF banned AAS in 1974 and used immunoassays to identify them at the European Athletics Championships in Rome that same year. [4] Following the ban on anabolic steroids at the 1976 Olympics, East German women swimmers are accused of using anabolic steroids. When Shirley Babashoff (USA) accused her competitors of using anabolic steroids because of their large muscles and deep voices, one East German official replied: "They came to swim, not to sing." [5]

As a result of growing international efforts to combat the effects of sports-enhancing substances, the IOC Medical Commission reached its climax in 1999, when the World Anti-Doping Agency (WADA) was created to strengthen the fight against chemistry, to test athletes at the upcoming Olympics and increase drug testing standards, which WADA so eagerly set to work that now no athlete using illegal substances can feel calm. [2ci] Since then, WADA has continued the struggle, supported by the generally accepted WADA Code and the International Anti-Doping Convention at UNESCO. [7] He delegates work in individual countries to regional and national anti-doping organizations (RADO and NADO) and obliges these organizations to comply with the World Anti-Doping Code [8] [9].

The World Anti-Doping Code is the WADA Basic Document, which was first adopted in 2003 and entered into force in 2004. Subsequently, three changes were made to it: the first time since January 1, 2009, the second from January 1, 2015 and the third time from April 1, 2018 (changes to compliance). The newly revised World Anti-Doping Code 2021 will enter into force on January 1, 2021 of the year. [10]

The World Anti-Doping Code (the Code) provides a consistent anti-doping policy across sport and international borders. It is based on five international standards aimed at bringing consistency between anti-doping organisations.

It covers: • testing and investigations • laboratories • therapeutic use exemptions • the list of prohibited substances and methods • protection of privacy and personal information. [11]

1.2. WADA Prohibited Substances List

Doping substances and methods are included in the WADA banned list if they meet two of the following three criteria: [12]

• Evidence that it has the potential to improve athletic performance;

• Use of a substance or method poses a health hazard;

• Use of a substance or method violates the spirit of the sport.

WADA also accredits about 30 laboratories for the necessary scientific analysis for doping control. [13]

It is absolutely undeniable that the use of prohibited drugs not only adversely affects the state of the body, but also undermines the ideological views on sports. This problem also contains a moral character, since the use of doping improves the athlete's results and this inequality does not follow from the level of preparedness that "is provided for by the rules of competitions in any sport, but is determined by the level of development of the pharmacological industry and its involvement in the sports field" [14] . The high prestige of sports victories, the related material rewards lead to the fact that many athletes and their coaches strive for victory at all costs, including through the use of prohibited stimulating drugs. But sometimes not only the trainer and the doctors resort to such methods. This is not surprising, because the high result of the athlete (or team) is also the prestige of the country for which he stands. And achieving maximum results in sports is not possible without pharmacological support. Therefore, competitions hold medical commissions to help detect doping. [15]

The first important direction of improving the system of sports training is to increase the effectiveness of the professional readiness of a sports coach. The lack of professional competence of trainers is often the reason for leaving sports of talented children and adolescents. [16]

The role of doctors in supporting athletes dates back to ancient times. Since the 18th century, the role of doctors in the “doping” of athletes with prohibited substances can be documented. Today, even though governments, sports authorities, and organized medicine have refused doping, a significant minority of doctors seem to continue to play a role in doping athletes. Several studies have shown that doctors and officials consult with doctors to obtain doping recommendations, and most of them indicated that they did not want to prescribe doping substances without medical indications. Recent studies have shown that the majority of doctors know about doping agents and doping in general remain weak. [17]

The creation, in 2004, of the World Anti-Doping Code and the uniform "banned list" of banned sports substances and methods became a steady international response to the the issue of doping violence in modern sports. At the same time, the principle of the 'exemption from therapeutic use' (TUE) was implemented and recognized that athletes suffering from disease or injury can legally require the use of 'prohibited' drugs or procedures. In the WADA special "International Standard" (IS), the processes of the TUE process are clearly described and illustrated. As a consequence, the Anti-Doping Organizations (ADOs) were permitted to set up the "Therapeutic Use Exemption Committees" (TUECs), which were clearly defined in the IS membership and responsibilities that could be applied by the athlete and assisting doctors. A thorough examination of this request by a TUEC team of doctors may allow you to get approval for a treatment that is otherwise prohibited, provided that the necessary conditions are fulfilled. [17]

Due to their unique relationships with athletes, doctors play an important role in preventing the use of doping in sports. For doctors, as well as for athletes, it is important to closely monitor changes in the anti-doping rules. [18] Most sports organizations have a chief medical officer who can help with the process of exclusion from therapeutic use, or sports administrators should be able to guide the athlete accordingly. [19]

Doctors and healthcare providers who treat athletes play an important role in the sports community. Knowledge and understanding ensure that the health care provided to the athlete complies with the anti-doping rules [20]

Despite more active efforts to combat doping since the beginning of the twentieth century, annual laboratory doping tests show that in the world of sports the problem has not decreased on a large scale. [21] Unlike today's anti-doping efforts, athletes are offered new methods and techniques in this area [22], and some athletes are also involved in

doping behavior. There are fewer comprehensive empirical studies of athletes' knowledge of illicit substances. In early studies, the mechanism of action of drugs (primarily androgens and stimulants) taken by athletes, and increased performance were studied. [23] Regarding substances on the banned list, many of the athletes participating in the survey could not smoke, citing only amphetamines and AAS. [24].

Although many international athletes claim to have extensive knowledge of doping, this is denied in another scientific article that does not list substances on the prohibited list [25].

More comprehensive work has recently been done on sample size for professional and teenage athletes, but these studies still consist mainly of closures that required recognition from the established list of banned substances. [26] [27]

1.3. Anti-Doping Rules Awareness Study in Sports

In general, even in recent years, athletes' knowledge of the list of prohibited substances varies from a limited to a moderate level. [28] (see tab. 1) Australian athletes showed limited knowledge in the Prohibited Substances List of a wide range of substances and in the effects of common PESs. [29] Due to their ready accessibility, unintentional violations of over-the-counter (OTC) medications, such as analgesic and nutritional supplements, have caused particular concern. Poor knowledge and awareness can result in positive OTC tests. For example, only 35 percent [30] and only 74 percentage of Olympic athletes were able to list only two OTCs containing banned substances [31]

Table 1 . Laboratory fidings in doping tests 1987- 2018 [41]

Year	*Doping tests*	*AAF's (n)₁*	*ATF's (n)₁*	*AAF'S+ATF'S*	*Findings(%)₂*
1987	37,882			854	2,25
1988	47,069			1,153	2,45
1989	52,371			1,206	2,30
1990	71,341			932	1,31

1991	84,088			805	0,96
1992	87,808			993	1,13
1993	89,166			1,222	1,57
1994	93,680			1,278	1,36
1995	93,938			1,516	1,61
1996	96,454			1,569	1,63
1997	106,561			1,779	1,67
1998	105,250			1,926	1,83
1999	118,259			2,341	1,98
2000	117,314			2,229	1,90
2001	125,701			2,075	1,65
2002	131,369			2,371	1,80
2003	151,210			2,447	1,62
2004	169,187			2,909	1,72
2005	183,337			3,909	2,13
2006	198,143			3,887	1,96
2007	223,898			4,402	1,97
2008	274,615	2,956	2,105	5,061	1,84
2009	277,928	3,091	2,519	5,610	2,02
2010	258,267	2,790	2,027	4,817	1,87
2011	243,193	2,885	1,971	4,856	2,00
2012	267,645	3,190	1,533	4,723	1,76
2013	269,878	3,529	2,433	5,062	2,21
2014	283,304	3,153	713	3,866	1,36
2015	303,369	3,809	2,103	5,912	1,95
2016	300,565	4,822	622	5,444	1,81
2017	322,050	4,596	160	4,756	1,48
2018	334,177	4,896	223	5,116	1,49

AAFs adverse analytical findings, ATFs atypical findings

1 Available since 2008

2 Percentage of findings (AAFs + ATFs) as a proportion of the total number of doping tests. Further explanations of the terms AAFs and ATFs can be found in WADA's Laboratory testing figures [41]

Although WADA has been around for a long time, articles have been written about only a small fraction of the exposure to illegal substances. More research has been done on the effects of growth hormone and erythropoietin on athletes during competitions, as well as side effects. [32] [33] [34]

Research by 384 professional athletes from Uganda on doping awareness and practice found that 60% of athletes were familiar with information on doping, much of it being found by peers (41.9%), coaches (29.7%) or the media (15.6%). Doping drugs were stated to be small in this sample, which may show that less athletes use doping in Uganda. But because there are so many athletes, their knowledge of their athletes remains suspicious, and education anti-doping programs are still necessary to bridge knowledge gaps. [35]

Most Spanish footballers did not know the prohibited list for the World Anti-Doping Agency, and this study shows that they need a broad educational doping programme. [36]

The study carried out by Saudi Arabic sportsmen to investigate the attitude and knowledge of athletes on prohibited substances has shown that dope users among them are too many for good results in sports. The latest work shows that footballers are not allowed and less compassionate, but that their views and their understanding in particular need to be strengthened. [37]

Regarding an ethical review and support by the Human Study and Ethics Committee of the University of New South Wales, participants from the Australian Sciences and Medicine Sports Conference were interviewed in 2009 and members of Australia's sports organizations were distributed. State and professional bodies (chiropractors, nutritionists, psychologists, sports therapists and trainers) included in regional sporting associations (the athletics institutes and academy). Research study has shown that a health professional who treats former professional athletes 15 years or former knows more about antidoping than any other type of ASPs. According to the WADC, an ASP is "any coach, trainer, manager, agent, team staff, official, medical, paramedical personnel, parent or any other person working with, treating or assisting an

athlete participating in or preparing for sports competition" (WADA, 2009, p. 128) ASP must therefore be more educated and involved in the ethical activities of peers both in their area of research and in anti-doping research. [38] Surveys in Poland on PES-related issues often display findings from previous writers. In order for doctors to do anti-doping activities, their image in the community of PES users needs to be improved. [39]

1.4. Purpose of the study

Nowadays, Azerbaijan is recognised throughout the world as a global sporting nation. The performance of our athletes both domestically and overseas shows that once again.

The foreign sports systems are also greatly respected for our sport performances, achievements, wins, as well as the funding offered by the State for athletics and the introduction of state programmes. It is no accident that our work is very critical for the International Olympic Committee, the European Olympic Committee and international federations.

Well, we see, observe this. We must be grateful to our outstanding athletes for this. In general, I think that the work done in the field of sport also inspires young people. We are pleased that the young people of Azerbaijan have shown great interest in sports. Of course, the successes of our outstanding athletes bring our sporting glory to even greater heights.

However, despite these successes, as in the rest of the world, we have cases of doping, and we are fighting for it. For to clean sport Azerbaijan National Anti-Doping Agency (AMADA) was established in December 23, 2016 as a national anti-doping organization with the mission of the fight against doping in sport. The legal background covering the Agency's mission is the Law 'On the fight against use of doping substences and methods in sport' signed.

The aim of the study was to investigate athletes' and athlete support personnel knowledge and understanding relating to doping substances, WADA Prohibited List and doping control procedures. Determine the level of anti-doping knowledge and identify the attitude to the problem of doping among athletes, coaches and doctors.

CHAPTER II.

MATERIALS AND METHODS

2.1. Study design and participants

The survey comprised of 24 questions developed to achieve the aims and objective of the study. Questionaire (see tab.3) based on some questions which taken from WADA's application *WADA Play True Quiz* (7 item) [40] , remaining part (17 item) were conducted among the AMADA personel focused on (WADA) CODE rules. Only after the questionnaire in total 257 responders agreed to participate in this cross-sectional study. The study was conducted with athletes working in various federations (Azerbaijan Wrestling Federation, Absheron Volleyball Club, Azerbaijan Football Federations Association, Azerbaijan Boxing Federation), as well as doctors and coaches in the field of sports . Out of them 185 (72%) were athletes and 72 were athlete support personnel (27 Coaches (10,5%) and 45 physicians (45%)). Respondents characteristics described numerically as a percentage (see tab.2)

Survey material consisted from this sections of doping theme : prohibited list (5 question) ,antidoping rule violation (3 question) ,knowledge about doping agents (2 question) ,doping control (5 question) ,several aspects of doping (7 question) , opinion on doping (2 question).

Questions under number 1,10,23,24 were multi - variate questions (tab, while the others were dichotomous questions with the right answers.

An online search technique was developed using a set of keywords relating to doping to retrieve potentially important papers from the Pubmed (results from 1990 to 2020) , Science Index web archive . [58] The major search keywords included alterations in the nomenclature of "doping in sport," "physicists awareness," "coaches awareness," "athlete knowledge," "beliefs" and "knowledge."

Table 2.

The protocol and procedure of the study were approved by the ethics committee of ASAPES.					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Athletes**	**185**	**72,0**	**72,0**	**72,0**
	Coaches	**27**	**10,5**	**10,5**	**82,5**
	Physician	**45**	**17,5**	**17,5**	**100,0**
	Total	**257**	**100,0**	**100,0**	

Table 3. Questionaire

PROHIBITED LIST	
1. Are you aware the list of prohibited substances in sports and are you informated enough?	A) Yes , I informated enough
	B) Yes , I'm not familiar enough
	C) No.
2. How often is the prohibited list updated? [a]	A) Once a month
	B) Once a year
	C) Before every Olympic and Paralympic Games
3. How does athlete know if a substance is allowed to be used?	A) If the word "no doping" is written on the substance
	B) If the article does not contain items from the prohibited list
4. Do you think all kinds of substances are on the prohibited list?	A) Yes
	B) No
5. Is the list of prohibited substances same for the in-competition time and out of competition time for athlete ?	A) Yes
	B) No

ANTIDOPING RULE VIOLATION	
6. **Do you know that exists the 10 anti-doping rule violations ?**	A) Yes
	B) No
7. Who is responsible for the prohibited substance found in the athlete's sample ?	A) Athlete
	B) Physicians
	C) Coaches
	D) Your opinion
8. Is a positive doping test the only way for an athlete to be sanctioned ? [a]	A) True, there are no other Anti-Doping Rule Violations

	B) Wrong, there are an other Anti-Doping Rule Violations

KNOWLEDGE ABOUT DOPING AGENTS	
9. Are narcotic drugs included in the list of prohibited substances or not?	A) Yes
	B) No
10. What are the most commonly used doping drugs?	• Testosteron
	• Amphetamin
	• Stanozolol
	• Peptides
	• Growth hormones

DOPING CONTROL	
11. Can an athlete be tested for doping after a race if he or she does not participate in the race [42]	A) Yes
	B) No
12. Can an athlete's coach or doctor be sanctioned for violating the rules?	A) Yes
	B) No
13. If an athlete is disqualified from his sport, can he compete in another sport?	A) Yes
	B) No
14. How many times a year can an athlete be tested for a doping control process?	A) once or two time in a year
	B) unlimited
15. Can an athlete go to the Doping Control Station with his coach? [a]	A) Bəli , hər bir idmançının öz məşqçisi ilə DNM-ə getmək hüququ var
	B) Xeyr , heç bir idmançının öz məşqçisi ilə DNM-ə getmək hüququ yoxdur

SEVERAL ASPECTS OF DOPING	
16. Is it possible to buy doping drugs from pharmacies without a prescription?	A) Yes
	B)No
17. If doping is detected in the blood of an athlete, then whom you should complain to ?	A)to the Antidoping agency
	B)to athlete's Coach
	C)to the Federation
	D) to all of them
18.WADA stands for? [a]	A) World Anti- Doping Agency
	B) World Anti- Doping Organisation
19. Can samples collected for the detection of prohibited substances and methods in sports be carried out by any laboratory with the necessary equipment? [a]	A) Yes, with the permission of WADA
	B)NO, at those laboratories which have met the high standards of WADA and have been granted accredited status
20. Do you think is it possible to prescribe prohibited substances to an athlete, and if so, when?	A) Under no circumstances should an athlete be prescribed medication by WADA regulations
	B) Allows prescribing medication at the discretion of WADA when necessary for the athlete's health
	A) Yes

21. If the drug is safe for the athlete to use in his home country, can he safely use the same brand of medicine purchased abroad? [a]	B) No
22. Should an athlete check for the presence of a prohibited substance while taking medication?	A) Yes
	B)No

OPINION ON DOPING	
23. Why do you think are the athletes using doping?	A) For to win
	B) To regain strength as they maintain a strong diet
	C) as a narcotic drug
24. Do many athletes in Azerbaijan use doping?	A) Yes
	B) No

(a) Questions had taken from : WADA Play True Quiz (2018). WADA Play True Quiz. Available at: https://www.wada-ama.org/en/play-true-quiz

RESULT AND ANALYSES

Statistical analysis

- All calculations were carried out on the statistical package IBM Statistics SPSS-26.
- The data obtained were subjected to statistical processing using biostatistics methods – discriminant analysis methods were applied.
- For the analysis of qualitative characteristics in the studied groups, cross-tables of 2 x 2 and m x n were preliminarily compiled.

In dichotomous situations, the Pearson Chi-Square tetrachoric χ2-consent criterion was used, and for to determine the degree of contingency between qualitative data with variables number more than two, the following formula (polychoric correlation coefficient) was used.

Table 4. Statistical Results

		Groups						
		ATHLETES		COACHES		PHYSICIANS		P χ2
questions	answers	Count	Column N %	Count	Column N %	Count	Column N %	
1	answer A	108	58,4%	11	40,7%	41	91,1%	χ2=23,138 p<0,001
	answer B	58	31,4%	13	48,1%	4	8,9%	
	answer C	19	10,3%	3	11,1%	0	0,0%	
2	answer A	32	17,3%	5	18,5%	25	55,6%	χ2=40.117 p<0.001
	answer B	129	**69,7%**	13	**48,1%**	19	**42,2%**	
	answer C	24	13,0%	9	33,3%	1	2,2%	
3	answer A	51	27,6%	9	33,3%	32	71,1%	χ2=29,940
	answer B	134	**72,4%**	18	**66,7%**	13	**28,9%**	p <0,001
4	**answer A**	135	**73,0**%	14	**51,9%**	29	**64,4%**	χ2=5,531
	answer B	50	27,0%	13	48,1%	16	35,6%	p= 0,063
5	answer A	146	78,9%	21	77,8%	39	86,7%	χ2=1,473
	answer B	39	**21,1%**	6	**22,2%**	6	**13,3%**	p=0,479
6	answer A	109	**58,9%**	9	**33,3%**	40	**88,9%**	χ2=23.819
	answer B	76	41,1%	18	66,7%	5	11,1%	p<0.001
7	**answer A**	136	**73,5%**	22	**81,5%**	36	**80,0%**	
	answer B	28	15,1%	3	11,1%	8	17,8%	χ2=4,436 p=0,618
	answer C	11	5,9%	1	3,7%	1	2,2%	
	answer D	10	5,4%	1	3,7%	0	0,0%	
8	answer A	61	33,0%	12	44,4%	24	53,3%	χ2=6,962
	answer B	124	**67,0%**	15	**55,6%**	21	**46,7%**	p=0,031
9	**answer A**	148	**80,0%**	19	**70,4%**	34	**75,6%**	χ2=1,508
	answer B	37	20,0%	8	29,6%	11	24,4%	p=0,471
11	**answer A**	122	**65,9%**	14	**51,9%**	23	**51,1%**	χ2=4.659
	answer B	63	34,1%	13	48,1%	22	48,9%	p=0.097

12	**answer A**	138	**74,6%**	19	**70,4%**	31	**68,9%**	χ2=0,719 p=0,698
	answer B	47	25,4%	8	29,6%	14	31,1%	
13	answer A	35	18,9%	12	44,4%	11	24,4%	χ2=8,895 p=0,012
	answer B	150	**81,1%**	15	**55,6%**	34	**75,6%**	
14	answer A	41	22,2%	8	29,6%	16	35,6%	χ2=23,737 p=0,154
	answer B	144	**77,8%**	19	**70,4%**	29	**64,4%**	
15	**answer A**	147	**79,5%**	21	**77,8%**	34	**75,6%**	χ2=0,340 p= 0,844
	answer B	38	20,5%	6	22,2%	11	24,4%	
16	answer A	98	53,0%	12	44,4%	23	51,1%	χ2=0.695 p=0.706
	answer B	87	**47,0%**	15	**55,6%**	22	**48,9%**	
17	**answer A**	124	**67,0%**	12	**44,4%**	34	**75,6%**	χ2=46,636 p<0,001
	answer B	27	14,6%	0	0,0%	11	24,4%	
	answer C	26	14,1%	15	55,6%	0	0,0%	
	answer D	8	4,3%	0	0,0%	0	0,0%	
18	**answer A**	152	**82,2%**	25	**92,6%**	45	**100,0%**	χ2=10,779 p=0,005
	answer B	33	17,8%	2	7,4%	0	0,0%	
19	answer A	66	35,7%	10	37,0%	17	37,8%	χ2=0,079 p=0,961
	answer B	119	**64,3%**	17	**63,0%**	28	**62,2%**	
20	answer A	74	40,0%	10	37,0%	18	40,0%	χ2=0,89 p=0,957
	answer B	111	**60,0%**	17	**63,0%**	27	**60,0%**	
21	answer A	49	26,5%	10	37,0%	20	44,4%	χ2=6,045 p=0,049
	answer B	136	**73,5%**	17	**63,0%**	25	**55,6%**	
22	**answer A**	151	**81,6%**	20	**74,1%**	32	**71,1%**	χ2=2,848 p=0,241
	answer B	34	18,4%	7	25,9%	13	28,9%	
23	answer A	151	81,6%	20	74,1%	27	60,0%	χ2=10.821 p=0.029
	answer B	28	15,1%	5	18,5%	13	28,9%	
	answer C	6	3,2%	2	7,4%	5	11,1%	
24	answer A	67	36,2%	16	59,3%	28	62,2%	χ2=13.152 p=0.001
	answer B	118	63,8%	11	40,7%	17	37,8%	

4.1 Prohibited list section

It is clear from the table that, for the first question, physicians (91.1%) were highly knowledgeable and well informed about prohibited substances in sport, more than half of the athletes (58.4%) were sufficiently aware of notified prohibited substances in other groups, but the rest of the athletes (31.4%) were not sufficiently aware of such substances as other athletes. As for the coaches, we 're going to say the opposite of the athletes. Most of them (48.1%) heard of the prohibited list but were not sufficiently informed as a further (40.7 %) part of the coaches. At the same time, a certain percentage of coaches (11.1 %) and athletes (10.3 %) had not shown any information on the prohibited list. The difference between the answers was significant. (p<.001)

About the most up-to - date information on the prohibited list, three groups of additional athletes (69.7 %) were aware that it was once a year, but the correct response

differences between coaches (48.1 per cent) and athletes (42.2 %) did not result in a high statistical imbalance. Overall, out of three groups, 24.1 % of them thought it prohibited to update the list once a month, and 13.3 % responded that updates were made before each Olympic and Paralympic Game. There was a difference of significance. (p <0,001)

We describe the significant difference between the response of athletes to support staff on how they need to know the substance is allowed to be used. (p<0.001) Most of the athletes (72.4 %) and more than half of the coaches (66.7 %) have been strongly acknowledged that if the substance instruction does not include them from the prohibited list, this item may be used, but less than one-third of the physicians (28.9 %) have been provided.

For the next question from the prohibited list section, athletes (73.0 %) and doctors (66.4 %) demonstrated a high percentage were sure that the prohibited list would apply to all types of substances, with more than half of coaches (51.9 %). (p<.063)

All groups of athletes (78,9), coaches (77,8 %) and doctors (86,7 %) were not sufficiently informed that prohibited substances were not the same for in-competition and out-of-competition time for athletes. Less part of all the members of the group (19.2%) were aware of this issue. The statistical significance was not relevant. (p=0,479)

4.2 Anti – doping rule violation section

Almost part of the doctors (88.9 %) were responsible for 10 anti-doping violations, and more than half of the athletes (58.9 %) were also recognized, but we can not say that for coaches (33.3 %). Overall, there was a significant difference for this quiz. (p<0,001)

Although the alert was not statistically relevant among the group members (p=0.618), but most of the athletes (73.5 %), coaches (81.5 %) and physicians (80.0 %) replied that the athlete alone was responsible for the prohibited substance found in the athlete 's sample. Only 4.3 per cent of the 257 Respondents responded to their own version: responsible for all athlete support personnel. Other significance difference were discovered about the question of sanctions (p=0,031). More than half of athletes (67,0%) and coaches (55,6 %) were responsed right answer. Physcians acknowledged less than atletes group. (46,7 %)

4.3 Knowledge about doping agents

The level of knowledge on narcotics was high for atheletes (80.0 %), coaches (70.4 %) and physicians (75.6 %). Most of them answered the right point no matter there was no difference of significance. (p=0,471) (see Fig. 1. Question 10)

Fig. 1. question 10. Awarness about substances among athletes,coaches and physicians

- Testosterone for athletes (66.5%) and physicians (73.3%) were more informed than coaches(48.1%) . (p=.086)
- For amphetamine, athletes (60%) and physicians (60%) had the same alertness than coaches (22.2%). (p< 0.001)
- Stanazolol was recognized by more athletes (53.5 %) than coaches (23.20%) and doctors (15.6%) . (p <0.000)
- Peptides were more aware of physicians than the other two groups : athletes(42.2%) and coaches (7.4%) (p < 0.003)
- Growth hormone substance has been more informed by physicians (73.3%) and athletes (66.5%) than by coaches (37.0%).(p<0.005)

4.4. Doping control

Although there was no significance difference between the groopus in most of the questions in the doping control section , more than half of all athlete support personnel were answered correctly .

Most half of athletes (65,9 %) and coaches (51,9 %) and physicians (51,1 %) were acknowledged about testing of athlete for doping after the race if he or she not participate in the game. (p=0,097 %) Either most part of athlete support personnel (74,6 % athletes, 70,4% coaches, 68,9% physicians) were informated coach or doctor be sanctioned for violating rules. (p= 0.698) In the first place two group had shown good performance : they were athletes (81,1 %) and physicians (75,6 %) , also most half of coaches 55,6 % were informated that if athletes disqualified as a result of committing an Anti-Doping rule violation they cannot participate in competitions activities in any level of sport during their period of ineligibility. (p=0.012)

Every group (athletes 77,8 %, coaches 70,4 %, physicians 64,4 %) has also been informated there is no limit to the number of times an athlete can be tested each year including in competition, out of competition no matter there were no significance difference. (p= 0,054) The last question from this section either all categories of ASP (athletes 79,5 %, coaches 77,8 %, physicians 75,6 %) were responded fairly high percent about that every athlete has right to take coach for accompany them to the doping control station.

4.5 Several aspects of doping

Less than half of the athletes (47.0 %), physicians (48.9 %) and less than half of the coaches (55.6 %) provided reliable information on the impossibility of buying drugs from non-prescription pharmacies (p=0.706 %)

Approximately 67.0 % of athletes and 75.6 % of physicians responded that they had to warn the Antidoping Agency if doping was detected in the blood of an athlete. Well-near-heart half a percentage (44.6 %) of coaches responded to this, but not enough. There was a statistical difference. (p < .001)

The majority of participants (82.2 % athletes , 92.6 % coaches, 100 % of physicians) from three groups responded at a near-high level to the question that WADA stands for the World Anti-Doping Agency. There was a difference in statistical significance. (p = .005)

In addition, 77,4 % of ASP considered that the analysis of samples in sport is performed only by those laboratories that have met the high standards of WADA and have been granted accredited status. Among them 64,3 % athletes, 63,0 % coaches and 62,2 % phsyicians who were responded to this answer (p= 0,961)

Within the context of the question possibility of prescribing prohibited substances to an athlete, and probably when a total of 63.8 per cent of the respondents answered the correct answer (60 % of athletes , 63.0 % of coaches , 60 % of physicians) that WADA is permitted if it is considered necessary for the health of the athlete. The statistical significance was not relevant. (p=0.957%)

Almost the majority of participants (60.3 %) responded that athletes can not buy the same drug in different countries that are safe to use in their home country. The statistical significance was among athletes (73.5 %), coaches (63.0 per cent) and physicists (62.2 %). (p = 0.049)

The rules for carefully checking ingredients while taking athletes have been followed at a high rate by all ASPs (Athletes 81.6 %, Coaches 74.1 %, Doctors 71.1 %). Although there was no difference in statistical significance (p=0,241), but the respondents were informated about question.

4.6 Opinion on doping

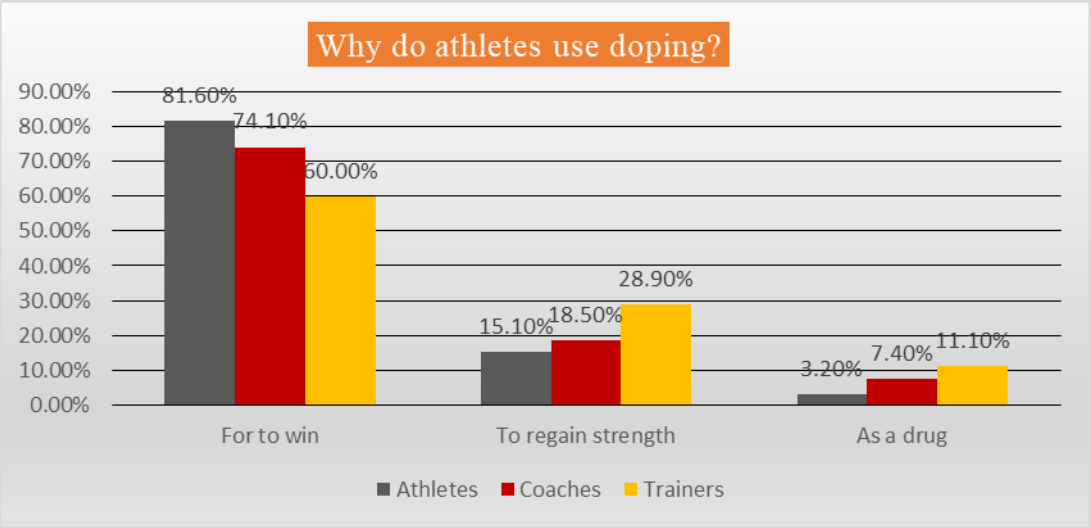

Fig. 2. Opinion of respondents about the reason for athletes' doping use

Most of the respondents (77.0 per cent) showed (Fig.2) that athletes using doping to win, the response rate was high for athletes (81.6 per cent) compared to coaches (74.1 per cent) and doctors (60.0 per cent). However, fewer ASPs were rated to regain strength as they maintained a strong diet (17.9 per cent) and narcotics (5.1 per cent). The statistical difference was relevance. (p=.029)

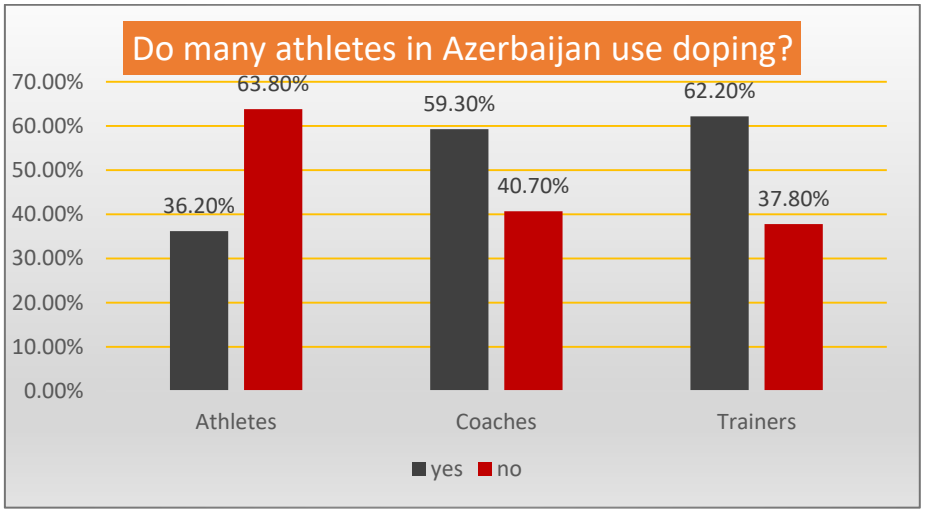

Fig. 3. Opinion of respondents about use of doping in Azerbaijan

In contrast to athlete responses (36.2 %), physicians (60.0 %) and trainers (74.1 %) have a higher response rate that many athletes are using prohibited substances in Azerbaijan. The difference in relevance of the result was statistically significant. (p= 0.001)

DISCUSSION

The main source of information for athletes seems to be providing by coaches. Doctors and other experts appear not to be acting as lead consultants. The anti-doping rules are increasingly known to athletes, but there is still a lack of knowledge that should be remedied using appropriate educational programmes. However, there is also a lot of information to be remedied by way of effective educational programmes. [42]

Based on the current survey about review of the psychometric properties of the Performance Enhancement Attitude Scale [43], increasing understanding of risk factors and the causes of doping behavior are among the priorities of the WADA[44]. According to a study undertaken by Canadian athletes[45] 76.7% of 582 respondents responded that they understood the anti-doping laws and 89.5% claimed that they followed the anti-doping regulations. Only 63.2% of participants stated about having access to anti-doping information, even so.

Studies also reported specific, yet important evidence about the guidelines for the usage of supplements. In the medical article [46] indicated that skilled English footballers were taking guidance from a physiotherapist group (28%), 21% from a Fitness Psychologist, 21% from a nutritionist and the alternative choice (15%) was their club's doctor physician. Unusually, 18 percentage of them confirmed that without any recommendation they used prohibited substances.

The research showed that 68 % were conscious of UK sports laws on illegally taking substances among the 706 professional English footballer[46] while the remainder were uninformed of the 32 % . In the 2007 report on drug use in sport, WADA found similar results confirming that athletes should know more about doping information [47].

While most athletes accept that doping is dishonest, unethical and unsafe due to penalties, its efficacy is still generally accepted. [42] Further in the study identified that the most prevalent causes of substance use as athletic performance (86 %) and financial development (74 %) . [55] Likewise, in a survey undertaken among the competitive athletes [56], 14.6 % of 82 participants admitted that they were using prohibited medications and 31.7 % confirmed taking recreational drugs.

And as such, athletes who believe that others are taking PED are more likely to start using them as well, which could establish a vicious cycle propagating the culture of pro-doping. That's why people around athletes (i.e. doctors, coaches, family , and friends) must be very careful about the "false consensus effect" when discussing doping. It is crucial that these stakeholders emphasize the importance of avoiding doping and do not

exaggerate the alleged use of PED or the presumption that those who succeed take PED. [42]

Researchers [45] reported that the three most common explanations for considering supplementation in a 582 athlete sample were increased strength (54.3%), preserved fitness, or avoided nutritional deficiencies (53.8%). In another reseach report, they [56] rated the self-esteem of 446 Finnish elite athletes, and 90% believe the banned substances have an impact on productivity growth. Athletes have insufficient knowledge of 30 substances / method banned classification. For 30 substances AAS, GH, blood doping and erythropoietin have been most correctly identified. [48]

Futhermore, Amphetamine has long been identified as an indirectly acting sympathomimetic CNS stimulator[49] . Amphetamine was used to treat narcolepsy and ADHD, but is not prescribed as anorexic. [50] [51]. Overdose leads to many complications in the human body.

Specific knowledge of illegal substance status emerged. Licensed compounds had larger and more right answers than banned substances (46.1% vs. 12.0%, $p<0.01$). Knowledge of the forbidden status of therapeutic drugs (forbidden and not forbidden) was bad, most in NZ or NK. Many competitors correctly concluded vitamins / minerals, protein powders, and iron supplements were not banned. [48]

In addition, in the report on athletes' use of dietary supplements[52], it was apparent that supplements are frequently used without complete awareness or consideration of the possible advantages and risks involved with their use and without consulting with sports medicine practitioners.

In fact, in another study [53], they stated that many athletes who used supplements (63/72) did not know the active ingredient of their supplement(61.9%), the possible effects(57.1%) or the mode of action (54.0%). Reseachers [55] valued the self-esteem of 446 Finnish elite athletes, and 90% assume that prohibited substances have an impact on increased productivity.

However, the survey among Ugandan athletes concluded that approximately 60% of athletes were familiar with doping information and that most of this information came from colleagues (41.9%), individual or team coaches (29.7%) or media (15.6%). Nearly 80% of these athletes, however, couldn't properly define doping.

Regarding doping behaviors / practices, at some point 9.3% of study participants had been offered a doping agent, although only 3.9% of athletes acknowledged recent use.

Regarding doping behaviors/practices, 9.3 % of the study participants had been offered a doping agent at some point, although only 3.9 % of the athletes acknowledged recent use. In this report, admitted use of doping agents was small, indicating that less athletes use doping agents in Uganda [57]

According too the total right answers results of 20 dualistic questions our survey's about awareness of anti-doping rules which are on the table (see tab.4) , for physicians (75 %) we can say they acknowledged less percentage than coaches (85%) in Azerbaijan , but not so much difference as athletes . But, best outcome presented athletes of our different federations. (90 %)

And per the results of the survey, the members of the group participating in the survey showed their own results in the sections of the prohibited list, anti-doping rule violation, knowledge about doping agents, doping control, several aspects of doping, opinion on doping. Most of athletes were more informative, because they are interested in their profession and win with the healthy way . The poor responses of the coaches indicated that they had limited expertise, which suggests that they felt the athletes they trained should succeed. However, the only way to compete is as unsuccessful as the results show, which is one of the main reasons why many athletes leave the sport unexpectedly and finish their careers prematurely.

Doping is not dangerous when carried out under the strict supervision of a doctor. Side effects, risks and dangers associated with the use of regulated pharmaceutical products and procedures are realistic. Patients should be identified using these drugs for the treatment of diseases. Was a doctor prepared to rule out adverse effects by taking a drug not as a patient, but as a sportsman? Of course, this is not possible. In addition, in many countries around the world, the distribution of many drugs on the Forbidden List is illegal. Therefore, motivating a doctor to use drugs contradicts medical ethics and professional behaviour. Doctors must protect human health and may be disciplined if they do not comply with this rule. [58]

So according to awareness of physicians among group participants were not lag behind athletes. The results show that our doctors have gained a lot of knowledge in a short time, despite the fact that in recent years these rules have been more strongly applied by AMADA.

CONCLUSION

All in all, depending on the type of question, doctors are aware of the list of banned drugs and anti-doping rule violations, but they are not very aware of the rights of athletes and doping problems. That makes it important for doctors to be trained on the rights of athletes. The high results of the athletes in these groups show that they are trying to get a lot of information in order to win in a positive or negative way. Also, the statistics published by AMADA for the last 3 years, show that the interest of athletes in Azerbaijan in sports laws seems to be growing. The low performance of other groups of trainers indicates that there is still a shortage of staff in their training over time. For this reason, it is necessary to try to make every sports staff think not only to win , but also to move forward with clean sports, to continue a healthy life, even after sports competitions and leaving the sport. In view of all this, ASAPES's master classes for the training of sports professionals are commendable. We need specific education programs and an integrative and proactive hard work containing athletes , coaches, physicians and other members of athlete support personnel.

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