NATIONAL ANTI-DOPING AGENCY

KNOWLEDGE, ATTITUDES AND PRACTICE OF COACHES BELONGING TO DIFFERENT GENERATIONS IN RELATION TO DOPING BEHAVIOR OF ATHLETES

FINAL REPORT

Prepared by:
Director ________________________ A.A. Vankhadlo

Head of Information and Education
Department, PhD ________________________ E. V. Planida

Minsk 2013
# Table of Contents

Acknowledgements ........................................................................................................................................ 3
Abbreviations ........................................................................................................................................ 4
Executive Summary .................................................................................................................................. 5
Introduction .................................................................................................................................................. 7
Analysis of Scientific, Methodological and Legal Literature and Generalization of National and Foreign Experience in Implementation of Anti-Doping Policies ................................................................................. 8
Methods and Organization of the Survey ................................................................................................. 10
Selection Characteristics ......................................................................................................................... 10
Research Results and Discussion ........................................................................................................... 13
  Ethical Issues of Doping in Sport. Anti-Doping Information and Education among Coaches .............. 13
  Study of Peculiarities of Anti-Doping Knowledge and Practices of Coaches .................................... 23
  Coaches’ Attitudes to the Problem of Doping in Sport ......................................................................... 28
Conclusions .................................................................................................................................................. 40
Bibliography ............................................................................................................................................... 42
Appendix 1 ................................................................................................................................................ 45
Appendix 2 ................................................................................................................................................ 47
Acknowledgements

The completion of this project would be impossible without practical assistance of the Ministry of Sports and Tourism in prompt provision of necessary information and granting collaboration of sports institutions in every region of Belarus.

NADA appreciates expertise of ISNAS employees who managed to carry out sociological survey in limited timeframe.

Heads of sports institutions that participated in the research facilitated greatly the work of interviewees.

The team of the researchers expresses thanks to HSC and RCOT in team sports for immediate implementation of the research results.
Abbreviations

**BSUPC** – Belarusian State University of Physical Culture

**COR** – College of Olympic Reserve

**COT** – Center of Olympic Training

**HSC** – the Highest School of Coaches

**NADA** – National Anti-Doping Agency

**NAS** – National Academy of Sciences

**NT** – National Team

**RCOT** – Republican Center of Olympic Training

**SHS** – School of the Highest Sportsmanship

**SSCY** – Sport School for Children and Youth

**SSORCY** – Sport School of Olympic Reserve for Children and Youth

**WADA** – World Anti-Doping Agency
Executive Summary

Project “Knowledge, Attitudes and Practice of Coaches Belonging to Different Generations in Relation to Doping Behavior of Athletes” was carried out from July 1 till December 31.

Research aim is to study the peculiarities of doping perceptions and attitudes towards justifiableness of doping usage of coaches of different age and qualification groups.

Tasks:
1) make theoretical analysis and generalize data of scientific, methodical and legal literature regarding project subject;
2) develop tools and program of the survey;
3) interviewing of coaches of different age and qualification;
5) input and processing of information, statistical analysis of data;
6) development of methodical recommendations on national anti-doping programs

Research object – system and methods of fight with doping perfection.
Research subject – existing practices of anti-doping work of coaches of different age and qualification groups.
Respondents – coaches presenting different age and qualification groups.

The following methods were used for the project: theoretical analysis and generalization of data received from scientific, methodical and legal literature, survey, technique of mathematical statistics.

The research was based in NADA and Institute of Sociology of NAS of Belarus. Trips to regions of Belarus (to visit specialized sport institutions) were necessary for data collection.

Target group of the research is coaches that train athletes in specialized sporting institutions and colleges of Olympic reserve. Selection scope is 400 interviewees. Selection type – quantitative control, controlled characteristics – age, region, sport/discipline, level of qualification –enabled comparison.

As a result of the project methodological recommendations on creating national anti-doping programs for the kinds of sports were developed.

The results of the project will be used:
– in the practice of planning measures for implementation of anti-doping policies of Belarus in the sphere of physical culture and sport;
– in planning information and education programs for athlete’s personnel a d athletes;
– in planning education process for experts in the sphere of physical culture and sport;
– in creation of information base for further research in doping prevention.
Project results will facilitate educational work among coaches. The main consumers of the research results will be education establishments that train athletes (SSCY, SSORCY, SHS, COT, COR) and athlete personnel Belarusian State University of Physical Culture, the High School for Coaches, Institute of Further Education and Personnel Development.

**Three Main Outcomes for Doping Prevention**

1. Presently the majority of Belarusian coaches irrespective of age group or qualification knowingly consider doping to be a sports problem that negatively influences the spirit of sport. But a substantial part of interviewees argue that some kinds of sports are impossible without doping. At the same time many coaches realize that development of new training methods and techniques can make a rival to the use of prohibited substances and methods. Therefore any anti-doping information and education campaign should bring forth the core idea of inadmissibility of doping in sport and duly highlight the possibility and motivate coaches to work on such modern techniques.

2. The majority of interviewed coaches demonstrated average or more than average anti-doping knowledge and more than half of them think that their knowledge is not enough for their work or they still feel the need to higher its level. More than 30% of the interviewed do not have an opportunity to visit information and education anti-doping activities due to different reasons. This shows that obligatory anti-doping education should be introduced on all levels of athlete and athlete’s personnel development starting with sports schools and colleges and through to the institutions of further training and the highest schools of coaches.

3. The overwhelming majority of coaches consider doping inadmissible in sport and they deliver this idea to their athletes, but most of them are still not ready for the full-scale fight against doping. A greater part of the respondents do not know about all the medicines that their athletes take, do not pay attention to possible signs of side-effects of the use of prohibited substances and methods that athletes can demonstrate, only a few coaches are ready to inform National Anti-Doping Agency about other coaches who use performance enhancing drugs. In such a situation it is necessary to look for ways to encourage coaches to actively involve into fight against doping, to stress importance of their active position for the future of fair sport and particularly educate coaches about the concrete consequences of prohibited substances and methods to health and how to interpret external symptoms that may be signs of doping.
Introduction

The research aim is to find out the level of anti-doping knowledge and competence of coaches of different age and qualification groups.

Presently more than five thousand coaches of different qualification work in the system of the Ministry of Sports and Tourism of Belarus and every fifth of them is a young specialist with less than 5 years of experience.

Certainly, professional competence and life experience of coaches of different generations are only a few of numerous factors that influence perceptions of doping and attitudes to its usage in sports. Nevertheless these factors inevitably influence the formation of value and motivation system of an athlete’s personality and his or her behavioral model.

Execution of this project - investigation of value systems and doping behaviors of coaches from different age and qualification groups will allow to:

- define the level of anti-doping competence of coaches that work with athletes (knowledge of health consequences, provisions of the Code and International Standards, athletes’ rights and responsibilities during testing sessions, possible sanctions to athletes and personnel for anti-doping rules violation, etc.);
- define the level of moral legitimacy of doping in the opinion of coaches (find out their perceptions of the level of popularity of doping among athletes, main motives of doping behavior, attitudes towards justifiableness of doping usage, etc.);
- make comparative analysis and reveal differential characteristics of coaches from different age and qualification groups on cognitive, evaluative and behavioral level in relation to doping by athletes.
Analysis of Scientific, Methodological and Legal Literature and Generalization of National and Foreign Experience in Implementation of Anti-Doping Policies

Today it is difficult to imagine a country that participate in the Olympic Movement and does not initiate activities for fighting doping in sports. 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. Development of an anti-doping program that brings up generations of athletes and coaches who do not accept doping as a possible way to the medals stand will allow to move doping from the list of acute problems to the non-crucial ones. Active work in this direction started about a decade ago when scientists started to investigate into athletes’ motives to dope (R.A. Ismailov, M.A. Zakharov, A.A. Kotomina, T. Engelberg). The results of such research are widely used in design of various methods and means of education for target audience – for athletes.

But research shows that one of the main factors that influence athlete’s decision to dope or not to dope is his coach’s opinion and behavior (T. Engelberg, K.A. Badrak). Accordingly coaches should be pilots who bring anti-doping philosophy to athletes. Nevertheless the potential of interrelations in the athlete-coach system has not been used in full so far. Studies of anti-doping policies of different states support this assumption.

Anti-doping policy of every country depends on many factors, the main of which is certainly the level of sports development in the country, but social, economic, financial issues and even national character play an important role. Obligations that governments undertook in the frame of International Convention against Doping in Sport and principles of the World Anti-Doping Code make the base for the effective system of anti-doping measures. Principles stated in these documents are reflected in local laws and regulations which contribute to intensification of anti-doping measures. Belarus has also ratified the European Anti-Doping Convention.

The system of punishment for doping is an important component of anti-doping policy. According to the research of T. Engelberg the majority of athletes and coaches support sanctions and penalty charges, and about half of the respondents agree that punishment under criminal law should be applied for the usage of performance enhancement drugs. Several countries (Italy, Finland, China, France) have already introduced criminal responsibility for doping not only for athletes but also for athlete’s personnel for assisting in doping.

At the moment the most severe punishment for a coach in Belarus is disqualification (expulsion). In 2012 National Anti-Doping Agency (NADA) in cooperation with Ministry of Sports and Tourism developed a project of legislative changes that would introduce criminal responsibility of athlete’s personnel for administration of or compulsion to doping of minors.
At the same time the more severe the punishment the higher is the level of responsibility not only of an athlete but also of his/her personnel and of the anti-doping organization as well. It is well known that ignorance of the law is no excuse, but in the present time cases of “accidental” usage of doping are still frequent, especially among young athletes. For this reason the educational part of anti-doping policy is paid much attention to.

In this research we are interested in what anti-doping measures are taken especially for coaches. Analysis of foreign experience shows that in the recent years the number of education and information programs designed for coaches has increased. But many organizations responsible for anti-doping education make use of available WADA projects – Coach’s Toolkit and computer-based learning tool CoachTrue. References to these resources can be found on web-sights of almost every international sports federation and of national sports federations of English, French and Spanish speaking countries. Programs of activities with coaches designed by NADOs of USA and UK are of particular interest. USADA online educational tutorial Coach’s Advantage covers the main anti-doping issues and end up with a test. This program is obligatory for coaches of national teams. In 2012 Great Britain launched on-line education program Coach Clean, that provides not only basic anti-doping knowledge, but also information about coaching styles and environments that can influence doping behavior of athletes. Apart from that coaches have access numerous additional resources such as video, documents and fact sheets.

In Belarus NADA is the organization in charge of anti-doping work with athletes’ personnel. For this purpose a course of lectures and seminars that covers the necessary anti-doping information and skills has been developed. To find the most effective forms and methods of cooperation with coaches is one of the tasks of the present research.
Methods and Organization of the Survey

At the first stage of research organization quota of coaches in kinds of sport was set for the survey in the quantity of 400 people taking into consideration their age and qualification. Sporting institutions for participation (RCOTs, CORs, SSCYs, SSORCYs) were defined and distributed on regional basis. Sporting institutions were chosen with due consideration for kinds of sports where athletes commit anti-doping rules violations most often. Sports specializations of the interviewees are the following: strength sport (weightlifting), track and field, martial arts, endurance sports – swimming, skiing, rowing, etc. (appendix 1).

The research interview form was designed with primary consideration for the specific features of the respondents – coaches of different age and qualification groups – and specific features of kinds of sport. The confidentiality of provided information and time that interview would take was also taken into consideration. The interview form consists of several blocks of questions. The main blocks are the following:

- Coaches’ attitudes to the questions of doping in sport
- Knowledge of anti-doping questions in sport
- Knowledge of anti-doping rules
- Attitudes to coaches and athletes who dope
- Use of prohibited substances and methods by minors, etc.

The interview form consists of about 50 questions.

All the documentation was copied and directed to the regions: tools and program of the survey (interview forms and explanatory cards), instructions for interviewers and leaders of interview network; briefing of field personnel was provided (briefing for leaders and interviewers, specification of the number of people involved in the field stage); field documents were prepared (letters to the sports institutions participating in survey, interviewer IDs, consent forms, etc.

Selection Characteristics

The selection volume is 400 respondents. The survey was carried out in all regions of Belarus including Minsk, Brest, Grodno, Vitebsk, Gomel, Mogilev regions and Minsk city, which was taken for a separate region for its numerous population and taking into account that a great number of sports institutions are situated in Minsk. 50 coaches were interviewed in each of Brest, Grodno, Vitebsk, Gomel, Mogilev regions, 15 of them work with athletes in Centers of Olympic Reserve, 15 – in CORs, 20 – in SSCYs. In Minsk region 47 coaches were interviewed, 12 of them from RCOTs, 15 – from CORs, 20 work in SSCYs. In Minsk 103 coaches were interviewed, including 25 coaches of National Teams, 30 – from RCOTs, 20 – from CORs, 28 – from SSCYs (appendix 2).
The percentage of respondents is almost even – 12.5% in each region excluding Minsk city with 25.8%. It is explained by the fact that except that a great number of SSCYs, SSORCYs, CORs, and RCOTs are situated in Minsk, coaches of National Teams participated in the research and all of them are based in Minsk.

Age groups are the following: 30 years old and under, 31-45 years old, 46 years old and older. The majority of the interviewed coaches were of 46 years old and older – 39.8% and of 31-45 years old – 38.3%, and only 22.0% were coaches of 30 years old and younger (pic. 1). Of 400 respondents 71.8% are male and only 28.3% are female.

![Age Groups of Respondents](image1)

**picture 1 – Age groups distribution**

Professional qualification of respondents was dependent on the place of work. The priority in the research was given not only to the coaches of NT who train mostly adult athletes, but in the first place to the investigation into the attitudes to doping in sport of coaches who work with young athletes. For this reason among interviewees there were 37.0% of coaches of SSCYs, 27.5% - of CORs, 29.3% of RCOTs, and only 6.3% of coaches of NT (pic. 2).

![Professional Qualification of Respondents](image2)

**picture 2 – Professional qualification distribution**
It should be noted that today most of the coaches who work both in youth and professional sport have work experience of 11 years and more – 63,0%, and there is only 17,5% of young coaches have less than 3 years of experience. (pic. 3).

Coaches in both individual and team kinds of sport participated in the survey. While the research coaches that train athletes in the following kinds of sports were interviewed: track and field, canoeing, rowing, swimming, ice hockey, volleyball, basketball, water polo, handball, skating, biathlon, figure skating, cycling, boxing, wrestling, weightlifting, shooting, archery, tennis, rhythmic gymnastics, and other.

Method of individual interview was used in the research. Interviews were carried out at the places of work of the respondents or at the places where information and education activities were held.
Research Results and Discussion

To reach the aim of the research – to study the peculiarities of anti-doping knowledge, perceptions and practices of coaches of different age groups and professional qualification the interview form contained several blocks of questions. The first block of questions provided personal information about respondents: sex, age, place of work, work experience, whether he/she used to be an athlete in the past and of what level. This data is given in the previous sections Selection Characteristics and Methods and Organization of the Survey.

The second block of questions deals with the moral issues of doping in sport and also contain questions that provide information on coaches’ attitude to the necessity of education anti-doping activities among athlete’s personnel.

The third block focus on the investigation into anti-doping knowledge and practices in sport.

Ethical Issues of Doping in Sport. Anti-Doping Information and Education among Coaches.

In the first place the questions of the second block of the interview were aimed to find out whether a coach experienced the problem of doping during his/her sports career and what is his/her attitude to doping. Analysis of the received answers shows the following results.

Question «Has anyone offered you to use prohibited substances and methods during your spots career?». The overwhelming majority – about 90% - of coaches state that they have never faced such a situation when they were athletes themselves. Roughly 9% of respondents confessed that they have been offered doping during their career. And almost 3% refused to answer. (pic. 4)

![Image of chart showing responses to the question about offering prohibited substances and methods during sports career.]

Picture 4 – Answers to question: «Has anyone offered you to use prohibited substances and methods during your spots career?»
The differences showed by age and qualification groups are not significant¹. 11,5 % of coaches older than 46, 9,2 % of those at the age of 30 and younger and 6,6 % of 31-45 years old have been offered doping. Thus there is no prominent statistical connection between the age of a coach and the fact that he/she has been offered doping during his/her sports career. (pic. 5)

If we look at the distribution of answers depending on the qualification of respondents it becomes clear that coaches of NT received proposals to dope most often (a quarter of all respondents of the group). At the same time less than 7 % of SSCY coaches received such offers. (pic. 6)

It lets us assume that as NT coaches used to be mostly high level athletes their victories were more important therefor their coaches were more interested to enhance their performance, and perhaps by means of forbidden substances and methods as well.

**Question «Did you use prohibited substances and methods when you were an athlete?»**. Almost 93% of respondents did not break anti-doping rules, about 5% confessed that they doped, 2,5% refused to answer (pic. 7).

---

¹ Differences that do not exceed 5% are not considered to be significant as they do not surpass the standard inaccuracy of the selection.
Differences in answers of age groups are not significant: 6.9% of 30 and younger, 4.0% of 31-45 years old, and 4.5% of 46 and older say that they doped when they were athletes. (pic. 8)

Differences in answers of qualification groups are significant but not crucial: 12.5% of NT coaches, 6.1% of COT coaches, 4.5% of coaches from COR, and only 2.7% of SSCY coaches used prohibited substances and methods during their sports career. (pic. 9)

Question «Do you think doping is a problem?»

This survey also shows that 91.3% of respondents are convinced that doping is a problem in the modern sport. According to the received data there are no significant differences in opinion distribution in age and qualification groups. Thus we can conclude that most coaches have comprehension of doping as a problem that negatively influences the spirit of sport. Nevertheless 8.7% of interviewees do not consider doping to be a problem. This fact is disturbing especially if we take into account the influence that coaches have on athletes as a role model. (pic.10)
Question «Do you agree that some kinds of sport are impossible without doping?». 32,8% of respondents agreed with the statement, 27,3% rather agree than disagree. Herewith the same number of the interviewed – 27,3% - do not agree to this statement and 12,5% rather disagree. (pic. 11).

The study of the answers in age and qualification groups reveal that notwithstanding that most coaches agree to the statement, there are respondents who stick to the opposite opinion. They make 36,0% among NT coaches, 35,0% among COT coaches, 27,7% of SSCY coaches, and only 16,4% of coaches who work in COR. (pic. 12).
So it becomes clear that education of athlete’s personnel should take into account the necessity to cover topics of doping in particular kinds of sport, its harmful effect on athlete’s health and future of sport. Special attention should be paid to coaches who work with the reserve.

**Question «Do you think that prohibited substances and methods have negative effects on athlete’s health?»**

Differences in answers of age and qualification groups are tiny. The majority of respondents gave affirmative answer – 95.8%, of which 85% are absolutely sure of the harm that doping brings to athlete’s health and 10.8% tend to think so. Less than 3% tend to think that doping is not harmful and about 2% do not know whether prohibited substances and methods are harmful or not. (pic.13) basing on this results it can be stated that Belarusian coaches are aware of harmful influence of doping.
Question: «Do you have enough anti-doping knowledge for your work?»

47,1 % of coaches (answers «yes» and «rather yes») think that they have enough knowledge, 51,1 % of respondents (answers «no» and «rather no») admit that more education is required. (pic.14)

Picture 14 – distribution of answers to question: «Do you have enough anti-doping knowledge for your work?»

In answers to this question in age groups no significant differences are revealed, as in many previous questions, therefore hereafter age groups differences will be discussed if significant variations are demonstrated.

In this issue certain distinctions are shown in qualification groups. More than half of NT and COT coaches answered «yes» and «rather yes» – 56,0% and 53,8% respectively. Coaches from CORs and SSCYs are not confident in their knowledge. (pic. 15) So it is evident that the lower the qualification the more is the need in additional anti-doping information. It can be explained by richer work experience of the former. NT and COT coaches work to a great extent with athletes of international level while in CORs and SSCY’s they work with reserve.

Picture 15 – distribution of answers to question: «Do you have enough anti-doping knowledge for your work?» in qualification groups
**Question:** «Have you participated in any anti-doping education activities?» This and a few following question give us possibility to get information about accessibility and demand for anti-doping education among Belarusian coaches.

A greater part of the respondents have taken part in anti-doping activities – 67,8%, but quite a number of coaches are not involved in education process – 32,3% answered «no». Most active turned to be NT coaches (76%) and those who are 46 years old and older (73,6%). (pic. 16, 17, 18).

![Graph](image)

**Picture 16** – distribution of answers to question: «Have you participated in any anti-doping education activities?»

![Graph](image)

**Picture 17** - distribution of answers to question: «Have you participated in any anti-doping education activities?» in age groups

![Graph](image)

**Picture 18** - distribution of answers to question: «Have you participated in any anti-doping education activities?» in qualification groups

**Question:** «Why have you not participated?»

Most respondents claimed they had no opportunity to visit such activities or that no such activities were carried out. (pic.19).
Question: «Do you think it is necessary to carry out anti-doping activities for athletes, coaches, or doctors?»

In this issue irrespective of age and qualification more than 90% of coaches consider that such activities should be held for every of mentioned groups. (pic. 20).

Question: «Do you have opportunity to use the Internet to get anti-doping information?»

About 70% of respondents can use the Internet to get anti-doping information. The majority of those using the Internet are young and highly qualified coaches. At the same time more than 60% of coaches working with the reserve have access to the Net, and even more than a half of older generation. (pic. 21, 22). It means that the Internet can be intensively used for anti-doping purposes in Belarus.
**Question:** «Do you feel the need to improve your anti-doping knowledge?»

Collected data indicates certain differences in self judgments about the need of anti-doping knowledge improvement. 62.8 % (answers «yes» and «rather yes») of the interviewed state that they should better their knowledge, 35.8 % (answers «no» and «rather no») do not find it necessary. (pic. 23).
Among age groups coaches of middle age (31-45 years old) appeared most responsible; more than 70% of them consider that they have to perfect their knowledge of anti-doping issues. Coaches in younger and older groups were more categorical in their negative responses – 37,5% and 43,4% respectively. Less qualified specialists experience more need in further anti-doping education (pic. 24).
Study of Peculiarities of Anti-Doping Knowledge and Practices of Coaches

This block of questions is aimed at studying of anti-doping knowledge and practices of coaches. For this purpose the respondents had to answer questions covering the rules and provisions of the World Anti-Doping Code and International Standards.

Question: «Do you agree that prohibited substances can be divided to «light» and «heavy»?»

More than half of the respondents tend to think that prohibited substances can be divided to “light” and “heavy” (35% are sure of it and 20.8% lean to this opinion). (pic. 25) 70% of those who agree with such division are 30 years old and younger about 50% of these 70% do not doubt it. If we look at qualification groups we see that more than 60% of COR coaches who work with young athletes share this opinion. (pic. 26) Wrong beliefs of these particular groups can be related as young coaches were students of colleges of Olympic reserve not so long ago and perceptions received during studying have not yet been corrected by work and life experience. This prompts that programs primarily for COR coaches and also for young coaches must address the problem of prohibited substances in detail.

Some respondents answered «do not know» which can mean not only lack of knowledge but also reluctance to answer.

Picture 25 – distribution of answers to the question: «Do you agree that prohibited substances can be divided to «light» and «heavy»?»

Picture 26 – distribution of answers to the question: «Do you agree that prohibited substances can be divided to «light» and «heavy»?» in age and qualification groups
On the one hand we can assume that 61.8% of the interviewed are not really competent in the questions of prohibited substances and methods, but on the other hand it is highly possible that positive answers of coaches point out their ethical position. By accepting the division of prohibited substances to “light” and “heavy” a coach makes allowance for the usage of “light” substances and tries to waive responsibility from a coach who gives such substances and from an athlete who dopes.

Question: «What of the mentioned below constitutes an anti-doping rules violation in your opinion? »

To find out how well coaches know the main provisions of the Code, in particular anti-doping rules, respondents were asked to answer this question. They were provided with 10 definitions 2 of which were incorrect «Use of any prescribed medicine» and «Non-observance of rules of sport equipment», the interviewed chose definitions they thought to be correct. Results show that most of the coaches are well aware of anti-doping rules, but some irregularity in answers distribution is displayed. So some rules coaches know better than other. The former are «Refusal to submit to sample collection», «Tampering or attempted tampering with any part of doping control», «presence of a prohibited substance», «Use or attempted use of a prohibited substance or method», «Trafficking or attempted trafficking in any prohibited substance or method», «Violation of requirements regarding whereabouts of an athlete» (65.2% - 86.5% know these rules), the latter are – «Administration or attempted administration of prohibited substances and methods» and «Possession of prohibited substances and methods » (less than 65% of respondents know that these are anti-doping rules). Most competent turned out to be NT coaches, 88%-96% of them know the rules. It is also remarkable that about 20% of the interviewed irrespective of age and qualification consider use of any prescribed medicine to be anti-doping rule violation. This again proves that more information about prohibited substances and methods should be provided.

Thus we can say that in general Belarusian coaches are aware of anti-doping rules, but knowledge is not thorough.

Athlete’s personnel should know and fulfill the requirements of testing procedure. But when coaches were asked whether testing can be done anywhere and anytime the greater part of respondents 63.5 % (anywhere) and 73.5 % (anytime) answered yes. Only 36.5 % didn’t agree with the statements and answered correctly that place and time of testing procedure is restricted by the International Standard for Testing.

67.5% of coaches know that there are no restrictions as to the number of doping controls that can be done to an athlete, 32.5 % are not aware of it. (pic. 27).
Question: «What are the athlete’s rights after he has received notification that he/she is chosen for doping control? »

This question offered 10 variants of answers to choose from and coaches had to pick the answers they thought to be correct. The wrong definitions were «to remain silent», «to take a shower», «to receive an extra day off».

The results once again prove that most of the respondents are pretty well aware of anti-doping information and rules of testing procedure particularly, but still uneven distribution of answers can be observed, meaning that some rights are more familiar to the respondents than others. (pic. 28).

Picture 27 – distribution of answers to the question: «Can testing be done anywhere, anytime, any number of times?»

Picture 28 – distribution of answers to the question: «What are the athlete’s rights after he has received notification that he/she is chosen for doping control?»
Studying answers to this question we state that most of the coaches gave correct answers, but survey shows that still knowledge of about 20,0 % - 40,0 % of respondents is not accurate. Thus the answer «to remain silent» was chosen by 37,5% of young coaches (30 years old and younger), 39,1% – of those aged 31-45, and 42,7% – of 46 years old and older; «to take a shower» by 21,6% of young coaches, 21,2% of middle age, and 34,4% of older ones. Thus coaches of 46 years old and older demonstrated the least competence in this sphere.

The most competent appeared NT coaches, 100,0% of them know that athlete has the right to review documentation relevant to doping control. It is important to notice that less than 50,0% of coaches are not sure whether athletes can have a delay in testing – only 52,0% of NT coaches chose this item, 32,5% of COT coaches, 39,1% of COR coaches, and 38,9% of coaches from SSCY. There are wrong answers as well. The most vivid is «the right to remain silent» which was chosen by 48,0% of NT coaches, 39,3% - COT coaches, 38,2% - COR coaches, 41,0% - SSCY coaches. (pic. 29).

![Image](image.png)

**Picture 29– distribution of answers to the question: «What are the athlete’s rights after he has received notification that he/she is chosen for doping control?» in age and qualification groups**

Results of this block of questions allow to conclude that there is a serious misbalance between the apparent and real knowledge that coaches possess. The participants of the survey tend to overestimate the level of their knowledge in the questions of prohibited substances and methods, anti-doping rules and the system of doping control. Presumably the more information about every component of
anti-doping program coaches will receive, the better will be their understanding of the problem of doping in sport.

Collected data implicates that any education program will be more effective if it is obligatory as coaches with least knowledge consider that they are competent in this sphere.
Coaches’ Attitudes to the Problem of Doping in Sport

The next block of the interview is devoted to ethical standards and has a number of questions that clarify coaches’ attitudes to doping in sport, what they know athletes who dope, their moral position on the problem of doping by minors, etc.

**Question: «Do you know whether athletes of other coaches dope? » «What do you think about it?»**

The greater part of respondents answered that they have no such information – 50,0 %, 31,8 % were uncertain and only 13,5 % replied affirmative. 86,6 % have negative attitude (negative and rather negative) attitude to the situation that athletes may dope, 5,2 % are positive about it and 8,2 % could not say what they think about it. (pic. 30, 31).

Рисунок 30, 31Picture – distribution of answers to the question: «Do you know whether athletes of other coaches dope?» and «What do you think about it?»

**Question: «Are you ready to provide information about usage of prohibited substances and methods by other coaches to NADA?»**

About 80% will not provide such information to NADA and thus will be conceiving facts of anti-doping rules violations by other athletes and coaches, 6,8 % of respondents cannot answer this question and only 14,3 % said «yes» and «rather yes» (pic. 32).
Most respondents do not know that other coaches purchase prohibited substances at the black market - 76.8%, about 20% had such information. (pic. 33).

Analysis of data about purchasing prohibited substances by other coaches revealed no serious deviations in responses in different qualification groups. Thus the overwhelming majority – 84.0% NT coaches, 66.7% - COT coaches, 74.5% - COR coaches, 85.1% - SSCY coaches answered no. It should be noted that coaches of COTs are most informed in this respect («yes» and «heard something» make 29.1%) (pic. 34).

Question: «If you think that your athlete’s rival dopes will you give doping to your athlete?»

The majority of the respondents will not give doping to their athletes - 84.0% NT coaches, 86.3% - COT coaches, 94.5% - COR coaches, 90.5% - SSCY coaches. At the same time there are coaches who are not sure of it and they chose
«rather no» - 6,2 % SSCY coaches, 4,5 % - COR coaches, 11,1 % - COT coaches, 16,0 % - NT coaches (pic. 35).

![Bar chart showing distribution of answers to the question: «If you think that your athlete’s rival dopes will you give doping to your athlete?» in qualification groups](image)

Collected data reveals differences in responds to the question «Are you sure that you know about all medicines that your athletes take?». Unfortunately the more than half of the coaches do not know what their athletes take – 55,3 % («no»32,5 % and «rather no»22,8 %) and only 43,8 % take interest in the state of health of their supervisees («yes» 22,8 % and «rather yes» 21,0 %) (pic. 36).

![Bar chart showing distribution of answers to the question: «Do you know what medicines take your athletes?»](image)

Distribution of answers in age groups show that the older a coach is the less his interest in the health of an athlete is. Age groups responded to the question «Are you sure that you know about all medicines that your athletes take?» in the following way: «no» and «rather no» - 62,3 % of 46 and older, 51,0 % - 31-45, 50,0 % 30 and younger (pic. 37).
Qualification group distribution displayed the following regularity: most coaches are not interested what medicines their athletes take. The sum of «no» and «rather not» give these results: 60,0 % NT coaches, 65,8 % - COT coaches, 54,7 % - SSCY coaches, and only 43,7 % COR coaches (pic. 38).

**Question:** «Do you pay attention to the possible side effects manifestations of prohibited substances and methods that show athletes of other coaches?»

40,8% do not pay attention to manifestations that can be caused by doping, 20,3 % replied «rather no», 16,3 % «rather yes» and only 16,0 % of coaches pay attention to such signs and answered «yes», (pic. 39).
Picture 39 - distribution of answers to the question: «Do you pay attention to the possible side effects manifestations of prohibited substances and methods that show athletes of other coaches?»

Depending on qualification responses show that about 40% in every group answered «no», which means that they do not pay attention to athlete’s behavior and other factors that can be caused by side effects of doping. Affirmative answers gave 20,3 % of SSCY coaches, 14,5 % - COR and COT, and only 4,0% of NT coaches. Consequently we can assume that most of coaches do not pay proper attention to behavior and condition of rival athletes.

The survey demonstrates that coaches are strict-minded as to informing athletes about negative effects of doping to health and sports career of an athlete. 92,8 % of the respondents said «yes» to the question «Do you inform your athletes about the risks associated with the use of prohibited substances and methods?» (pic. 40).

Picture 40 - distribution of answers to the question: question «Do you inform your athletes about the risks associated with the use of prohibited substances and methods?» question «Do you inform your athletes about the risks associated with the use of prohibited substances and methods?»

Question: «Imagine a situation. On the eve of a competition you find out that your athlete took a prohibited substance. What will be your reaction? »

Answers distribution are in the table below (Table 1).
Table 1 - Imagine a situation. On the eve of a competition you find out that your athlete took a prohibited substance. What will be your reaction?

<table>
<thead>
<tr>
<th>Choice</th>
<th>Frequency</th>
<th>%</th>
<th>Valid %</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make a decision to withdraw the athlete from the competition voluntary</td>
<td>187</td>
<td>46,8</td>
<td>46,8</td>
<td>46,8</td>
</tr>
<tr>
<td>Try to conceive the fact of doping and withdraw the athlete from competition explaining it with trauma or health problems or the like</td>
<td>26</td>
<td>6,5</td>
<td>6,5</td>
<td>53,3</td>
</tr>
<tr>
<td>Take the risk and allow the athlete to compete</td>
<td>16</td>
<td>4,0</td>
<td>4,0</td>
<td>57,3</td>
</tr>
<tr>
<td>Consult the team doctor</td>
<td>133</td>
<td>33,3</td>
<td>33,3</td>
<td>90,5</td>
</tr>
<tr>
<td>Try to receive TUE</td>
<td>12</td>
<td>3,0</td>
<td>3,0</td>
<td>93,5</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>1,3</td>
<td>1,3</td>
<td>94,8</td>
</tr>
<tr>
<td>Do not know</td>
<td>21</td>
<td>5,3</td>
<td>5,3</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

The table vividly depicts that most coaches preferred 2 of the offered variants. Thus about a half of the respondents states that if they face a situation when they learn about an athlete who doped on the eve of a competition they will voluntary withdraw him or her from the competition. The variant «Consult the team doctor» appeared to be quite popular, one third of the interviewed chose it. Each of the rest variants was not frequently chosen and received less than 7% of votes.

Distribution of choices in age and qualification groups is similar to the distribution in the section in general. It means that coaches of all ages who work with national teams, in centers of Olympic training, in sports colleges and schools prefer to voluntary withdraw athletes or to consult team doctors.

**Question:** «If your athlete will be granted a medal at the Olympics/World championship with doping will you give him/her prohibited substances knowing for sure that it will harm athletes health?»

More than 70% of respondents absolutely exclude such possibility in their actions; about 14% doubt that they could do that. (pic. 41) It is interesting to compare these answers to the information provided at the conference on fighting doping in sport organized by Belarus Wrestling Federation. A research carried out in Switzerland among athletes proved that about 70% of athletes were ready to dope notwithstanding granted serious damage to their health for a medal at the Olympics. The results of the present research inspire respect to the moral principles of coaches who value health and life of a person better than wealth. Reality makes us also take into consideration that it is always more difficult to take responsibility for someone’s wellbeing than for yourself and that athletes receive much more
from their victories than their coaches. Still the task of anti-doping organizations is to help coaches to pass their best anti-doping moral values to athletes.

Results in age and qualification groups do not differ from the distribution pattern of the selection in general. Only about 9% of coaches find it possible to dope with damage to health and truth for monetary reward.

**Question: «What is your attitude to the use of prohibited substances and methods by minors?»**

Almost all coaches (97,3 %) have negative attitude to the use of doping in the sport of children and youths. Distribution of answers among groups does not differ much negative attitude expressed 100 % of NT coaches and coaches aged 31-45, 99,1 % - COT and COR coaches, 96,9% older coaches, 96,6 % - SSCY coaches, and 93,2 - young coaches (pic. 42).

So practically 100 % of coaches who participated in the survey are convinced in the harmful influence of doping on health of underage athletes and that it should not be used at this age not only because of its bad effects to health of young athletes but also because of its negative influence on moral values of the youth.
Negative attitude to use of prohibited substances and methods by underage athletes most coaches confirm by responding to the question «From what age do you think doping is admissible?». 81,8 % of respondents think that at any age doping cannot be admissible. Yet 18,3 % admit that athletes may dope after certain age (mostly after 18) (pic. 43).

**Question:** «Do you think prohibited substances and methods can be substituted with accepted pharmacology?»

54,0 % of respondents think that it is possible, 25,8 % rather agree with the majority. 16,3 % («no» and «rather no») on the contrary state that modern sport is impossible without doping and authorized pharmacology today cannot help to achieve high results. 4,0 % are not sure what to answer. (pic. 44).

**Question:** «Do you find it possible to create new methods of training process that would let refuse prohibited substances and methods? »

Responses to this question in qualification groups distributed in the following way: most of the coaches think that such possibility exists. 88,0% of them are NT coaches, 79,0 % are from COTs, 75,0 % - work with youngsters in colleges, and
81,0 % - SSCY coaches (percentage of «yes» and «rather yes»). They consider development of new training methods a decent alternative to doping. 12%-18% in each group disagree. (pic. 45).

Picture 45 – distribution of answers to the question: «Do you find it possible to create new methods of training process that would let refuse prohibited substances and methods?» in qualification groups

As for the age groups most coaches agree that new methods and training techniques would be helpful in fighting doping. The sum of «yes» and «rather yes» makes 78,4 % for young coaches, 77,8 % for the ones aged 31-45, and 81,1 % for the older generation. From about 14% to 20% of respondents share negative position that is clear from answers «no» and «rather no». (pic. 46).

Thus irrespective of age and qualification most coaches believe that new progressive methods and techniques of training process can become a rival to doping.

Picture 46 – distribution of answers to the question: «Do you find it possible to create new methods of training process that would let refuse prohibited substances and methods?» in age groups
In many countries anabolic steroids are illegal. One of the questions of the survey is «Do you think that turnover of anabolic steroids should be put under restrain? ». Predictably most of the coaches agreed that such practice is desirable as the less people are tempted the higher is the probability that nothing wrong will happen. In practically all reference groups positive answers are at about 80% but for NT coaches. 68% of them answered «yes» and «rather yes» which is considerably lower percentage. (pic. 47)

![Picture 47 - distribution of answers to the question: «Do you think that turnover of anabolic steroids should be put under restrain? » in age and qualification groups](image)

**Question: «Do you think it is necessary to introduce criminal responsibility for athlete’s personnel for the use of prohibited substances and methods by minors?»**

Collected data shows that in general more than 80% of coaches are sure that they are fully or partially responsible for their athletes who dope. But only about 45% think that criminal responsibility should be introduced. Most differ opinions depending on the age of respondents. Thus most of the coaches older than 46 support the idea of criminal punishment, answers «yes» and «rather yes» compose 55,3%. The middle aged coaches are quite evenly divided between “pro” and “contra” - 45,1% and 45,8% correspondingly. Young respondents are most loyal to the coaches whose underage athletes dope, most of them are against criminal responsibility.

So we observe significant connection between the age of respondents and their attitude to criminal responsibility. The older a coach is the more responsibility he/she is ready to take. Certainly this result is partially determined by the natural tendency of young age to escape responsibility, all the more reason for information campaign to stress this issue.
About half of the coaches believe that sanctions to athletes who have committed anti-doping rules violations are the most effective way to fight doping, 27.3% think anti-doping information and education work is more effective, 23.3% consider in- and out-of-competition the best way to fight doping. (pic. 49).

**Question:** «What do you think in curriculum of what institutions implementation of anti-doping education programs will be most effective?»

Responses of coaches irrespective of age and qualification are almost evenly distributed among sports colleges, schools of the highest sportsmanship, sport schools, Institute of Further Training and Personnel Development of BSUPC, and institutions of higher education.
In this way coaches that participated in the research and kindly provided their responses make it clear that in the present moment it is extremely important to organize continuing anti-doping education starting at sport schools and through to the schools of highest sportsmanship. Introduction of anti-doping programs at all levels of athletes and coaches development will result in effective means of doping prevention in sport. (pic. 50).
Conclusions

1. Presently the majority of Belarusian coaches (91,3%) irrespective of age group or qualification knowingly consider doping to be a sports problem that negatively influences the spirit of sport. 8,7% of respondents do not consider doping to be a problem. With that the fact that 60,1% of interviewees argue that some kinds of sports are impossible without doping is disturbing. The younger the coaches are the stronger they stick to this opinion. 40,9% of coaches from colleges of Olympic reserve share this point of view. Whereas they are responsible for training young athletes, who are often in the period of achievement of personhood and are easily influenced by a reputable tutor – their coach. At the same time many coaches realize that development of new training methods and techniques can make a rival to the use of prohibited substances and methods. Therefor any anti-doping information and education campaign should bring forth the core idea of inadmissibility of doping in sport and duly highlight the possibility and motivate coaches to work on such modern techniques.

2. The majority of interviewed coaches demonstrated average or more than average anti-doping knowledge (50-80% correct answers). Most knowledgeable turned to be young coaches (30 years or younger) and coaches of national teams, although these categories of respondents also suggested from 20 to 40% of false judgments on different topics (prohibited substances, anti-doping rule violations, doping control procedure).

More than half of the respondents (51,3%) think that their knowledge is not enough for their work. Despite the fact that young coaches (54,6%) and coaches of national teams (56%) consider they have sufficient knowledge, they still feel the need to higher its level. Coaches of colleges of Olympic reserve (73,7%) have the pressing need to raise their competence.

Although most of the coaches (67,8%) visit information and education anti-doping activities, more than 30% of the interviewed do not have such an opportunity due to different reasons or do not wish to.

Basing on the above it can be concluded that obligatory anti-doping education should be introduced on all levels of athlete and athlete’s personnel development starting with sports schools and colleges and through to the institutions of further training and schools of the highest sportsmanship.

3. The carried out survey shows that the majority of Belarusian coaches have negative attitude to doping and realize its negative impact on health and spirit of athletes. 90% of respondents do not consider possible to offer doping to their athletes even if they know for sure that their opponent dopes. More than 90% of
coaches regularly talk to their students about the harmfulness of doping. In spite of this, most coaches are still not ready for the full-scale fight against doping. More than 55% of coaches do not know about all the medicines that their athletes take, more than 40% do not pay attention to possible signs of side-effects of the use of prohibited substances and methods by athletes who train with other coaches, only 7% of respondents stated that they are ready to inform National Anti-Doping Agency about other coaches who use performance enhancing drugs. In such a situation it is necessary to look for ways to encourage coaches to actively involve into fight against doping, to stress importance of their active position for the future of fair sport and particularly educate coaches about the concrete consequences of prohibited substances and methods to health and how to interpret external symptoms that may be signs of doping
Bibliography


34. About the Meeting of Standing Commission of NOC of Belarus «Sport and Law» <http://minjust.by/ru/site_menu/news/?id=697>. – Excess date: 22.03.2011.


## Appendix 1

### Kinds of Sport

<table>
<thead>
<tr>
<th>Sport</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rowing</td>
<td>36</td>
<td>9,0</td>
<td>9,0</td>
<td>9,0</td>
</tr>
<tr>
<td>Basketball</td>
<td>4</td>
<td>1,0</td>
<td>1,0</td>
<td>10,0</td>
</tr>
<tr>
<td>Ice skates</td>
<td>1</td>
<td>,3</td>
<td>,3</td>
<td>10,3</td>
</tr>
<tr>
<td>Biathlon</td>
<td>8</td>
<td>2,0</td>
<td>2,0</td>
<td>12,3</td>
</tr>
<tr>
<td>Biathlon, jumping race</td>
<td>1</td>
<td>,3</td>
<td>,3</td>
<td>12,5</td>
</tr>
<tr>
<td>Box</td>
<td>11</td>
<td>2,8</td>
<td>2,8</td>
<td>15,3</td>
</tr>
<tr>
<td>Wrestling</td>
<td>2</td>
<td>,5</td>
<td>,5</td>
<td>15,8</td>
</tr>
<tr>
<td>Sambo</td>
<td>1</td>
<td>,3</td>
<td>,3</td>
<td>16,0</td>
</tr>
<tr>
<td>Cycling</td>
<td>12</td>
<td>3,0</td>
<td>3,0</td>
<td>19,0</td>
</tr>
<tr>
<td>Water polo</td>
<td>1</td>
<td>,3</td>
<td>,3</td>
<td>19,3</td>
</tr>
<tr>
<td>Volleyball</td>
<td>5</td>
<td>1,3</td>
<td>1,3</td>
<td>20,5</td>
</tr>
<tr>
<td>Freestyle wrestling</td>
<td>24</td>
<td>6,0</td>
<td>6,0</td>
<td>26,5</td>
</tr>
<tr>
<td>Handball</td>
<td>6</td>
<td>1,5</td>
<td>1,5</td>
<td>28,0</td>
</tr>
<tr>
<td>Canoeing</td>
<td>15</td>
<td>3,8</td>
<td>3,8</td>
<td>31,8</td>
</tr>
<tr>
<td>Greco-Roman wrestling</td>
<td>15</td>
<td>3,8</td>
<td>3,8</td>
<td>35,5</td>
</tr>
<tr>
<td>Judo</td>
<td>10</td>
<td>2,5</td>
<td>2,5</td>
<td>38,0</td>
</tr>
<tr>
<td>Judo, sambo</td>
<td>2</td>
<td>,5</td>
<td>,5</td>
<td>38,5</td>
</tr>
<tr>
<td>Karate</td>
<td>3</td>
<td>,8</td>
<td>,8</td>
<td>39,3</td>
</tr>
<tr>
<td>Karate kekusinkay</td>
<td>1</td>
<td>,3</td>
<td>,3</td>
<td>39,5</td>
</tr>
<tr>
<td>Skating</td>
<td>9</td>
<td>2,3</td>
<td>2,3</td>
<td>41,8</td>
</tr>
<tr>
<td>Skating short track</td>
<td>1</td>
<td>,3</td>
<td>,3</td>
<td>42,0</td>
</tr>
<tr>
<td>Track and field</td>
<td>103</td>
<td>25,8</td>
<td>25,8</td>
<td>67,8</td>
</tr>
<tr>
<td>Cross-country skiing</td>
<td>9</td>
<td>2,3</td>
<td>2,3</td>
<td>70,0</td>
</tr>
<tr>
<td>Sport</td>
<td>Participants</td>
<td>Gold</td>
<td>Silver</td>
<td>Bronze</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------</td>
<td>------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Table tennis</td>
<td>4</td>
<td>1,0</td>
<td>1,0</td>
<td>71,0</td>
</tr>
<tr>
<td>Powerlifting</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>71,3</td>
</tr>
<tr>
<td>Swimming</td>
<td>35</td>
<td>8,8</td>
<td>8,8</td>
<td>80,0</td>
</tr>
<tr>
<td>Swimming, modern pentathlon</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>80,3</td>
</tr>
<tr>
<td>Beach volleyball</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>80,5</td>
</tr>
<tr>
<td>Platform diving</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>80,8</td>
</tr>
<tr>
<td>Platform diving, downhill skiing</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>81,0</td>
</tr>
<tr>
<td>Shooting</td>
<td>10</td>
<td>2,5</td>
<td>2,5</td>
<td>83,5</td>
</tr>
<tr>
<td>Sambo</td>
<td>2</td>
<td>0,5</td>
<td>0,5</td>
<td>84,0</td>
</tr>
<tr>
<td>Synchronous swimming</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>84,3</td>
</tr>
<tr>
<td>Modern pentathlon</td>
<td>5</td>
<td>1,3</td>
<td>1,3</td>
<td>85,5</td>
</tr>
<tr>
<td>Sporting acrobatics</td>
<td>2</td>
<td>0,5</td>
<td>0,5</td>
<td>86,0</td>
</tr>
<tr>
<td>SPORTS gymnastics</td>
<td>2</td>
<td>0,5</td>
<td>0,5</td>
<td>86,5</td>
</tr>
<tr>
<td>Archery</td>
<td>7</td>
<td>1,8</td>
<td>1,8</td>
<td>88,3</td>
</tr>
<tr>
<td>Taekwondo</td>
<td>3</td>
<td>0,8</td>
<td>0,8</td>
<td>89,0</td>
</tr>
<tr>
<td>Tennis</td>
<td>7</td>
<td>1,8</td>
<td>1,8</td>
<td>90,8</td>
</tr>
<tr>
<td>Weightlifting</td>
<td>6</td>
<td>1,5</td>
<td>1,5</td>
<td>92,3</td>
</tr>
<tr>
<td>Fencing</td>
<td>5</td>
<td>1,3</td>
<td>1,3</td>
<td>93,5</td>
</tr>
<tr>
<td>Figure skating</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>93,8</td>
</tr>
<tr>
<td>Freestyle</td>
<td>5</td>
<td>1,3</td>
<td>1,3</td>
<td>95,0</td>
</tr>
<tr>
<td>Ice hockey</td>
<td>15</td>
<td>3,8</td>
<td>3,8</td>
<td>98,8</td>
</tr>
<tr>
<td>Rhythmic gymnastics</td>
<td>4</td>
<td>1,0</td>
<td>1,0</td>
<td>99,8</td>
</tr>
<tr>
<td>Short track, skating</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 2

<table>
<thead>
<tr>
<th>Region</th>
<th>Place of work of the respondent</th>
<th>Name of sport institution</th>
<th>Location of sport institution</th>
<th>Number of interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brest</td>
<td>Center of Olympic Reserve</td>
<td>State Specialized Educational and Sporting Establishment «Brest Regional Center of Olympic Reserve in Rowing»</td>
<td>Brest</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>State Specialized Educational and Sporting Establishment «Brest Regional Center of Olympic Reserve in Aquatics»</td>
<td>Brest</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>College of Olympic Reserve</td>
<td>Educational Establishment «Brest State Regional College of Olympic Reserve »</td>
<td>Brest</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Sports School for Children and Youths</td>
<td>State Specialized Educational and Sporting Establishment «Brest Regional School of the Highest Sportmanship »</td>
<td>Brest</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>State Establishment «Brest Regional School of Olympic Reserve for Children and Youths»</td>
<td>Brest</td>
<td>10</td>
</tr>
<tr>
<td><strong>TOTAL in Brest region</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>50</strong></td>
</tr>
<tr>
<td>Vitebsk</td>
<td>Center of Olympic Reserve</td>
<td>State Specialized Educational and Sporting Establishment «Vitebsk Regional Center of Olympic Reserve in Rowing »</td>
<td>Polotsk</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>College of Olympic Reserve</td>
<td>Educational Establishment «Vitebsk State College of Olympic Reserve »</td>
<td>Vitebsk</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Sports School for Children and Youths</td>
<td>Educational and Sporting Establishment «Vitebsk Regional School of the Highest Sportmanship »</td>
<td>Vitebsk</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SSORCY №8</td>
<td>Vitebsk</td>
<td>9</td>
</tr>
<tr>
<td><strong>TOTAL in Vitebsk region</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>50</strong></td>
</tr>
<tr>
<td>Grodno</td>
<td>Center of Olympic Reserve</td>
<td>State Establishment «Grodno Center of Olympic Reserve in Ice Hockey»</td>
<td>Grodno</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>College of Olympic Reserve</td>
<td>Educational Establishment «Grodno State College of Olympic Reserve училище олимпийского резерва»</td>
<td>Grodno</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Sports School for Children and Youths</td>
<td>Establishment «School of the Highest Sportmanship» of the Department of Physical Culture, Sport and Tourism of Grodno Region Administration »</td>
<td>Grodno</td>
<td>20</td>
</tr>
<tr>
<td><strong>TOTAL in Grodno region</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>50</strong></td>
</tr>
<tr>
<td>Gomel</td>
<td>Center of Olympic Reserve</td>
<td>Establishment «Gomel Regional Center of Olympic Reserve in Track and Field»</td>
<td>Gomel</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>College of Olympic</td>
<td>Educational Establishment «Gomel State College of Olympic Reserve »</td>
<td>Gomel</td>
<td>8</td>
</tr>
<tr>
<td>Reserve Branch of Educational Establishment «Gomel State College of Olympic Reserve »</td>
<td>Mozyr</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establishment «Школа высшего спортивного мастерства»</td>
<td>Gomel</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Union Sports School for Children and Youths in shooting</td>
<td>Gomel</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Union Sports School for Children and Youths in shooting</td>
<td>Gomel</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSORCY in swimming «Sozh»</td>
<td>Gomel</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Establishment «City Sports School for Children and Youths №6»</td>
<td>Gomel</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL in Gomel region</strong></td>
<td></td>
<td><strong>50</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minsk</td>
<td>Center of Olympic Reserve</td>
<td>Establishment «Republican Center of Olympic Training in Winter Sports «Raubichi» »</td>
<td>Raubichi</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establishment «Republican Center of Olympic Training in Rowing »</td>
<td>Zaslavl</td>
<td>4</td>
</tr>
<tr>
<td>College of Olympic Reserve</td>
<td>Educational Establishment «Plestchintsy State Regional College of Olympic Reserve »</td>
<td>Plestchintsy</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Educational Establishment «Borisov State Regional College of Olympic Reserve »</td>
<td>Borisov</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Sports School for Children and Youths</td>
<td>State Establishment «Specialized SSORCY in swimming of Soligorsk »</td>
<td>Soligorsk</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>State Specialized Educational and Sporting Establishment «SSCY №1 of Molodechno »</td>
<td>Molodechno</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL in Minsk region</strong></td>
<td></td>
<td><strong>47</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mogilev</td>
<td>Center of Olympic Reserve</td>
<td>State Specialized Educational and Sporting Establishment «Mogilev Regional Center of Olympic Reserve in track and Field and Team Sports »</td>
<td>Mogilev</td>
<td>15</td>
</tr>
<tr>
<td>College of Olympic Reserve</td>
<td>Educational Establishment «Mogilev State College of Olympic Reserve »</td>
<td>Mogilev</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Sports School for Children and Youths</td>
<td>State Specialized Educational and Sporting Establishment «Regional School of the Highest Sportsmansh»</td>
<td>Mogilev</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>State Specialized Educational and Sporting Establishment «Mogilev Regional Sports School for Children and Youths in Rowing »</td>
<td>Mogilev</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL in Mogilev region</strong></td>
<td></td>
<td><strong>50</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minsk</td>
<td>National Team</td>
<td>Kinds of Sport: cycling, archery, short track, track and field, swimming, biathlon, rowing</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Center of Olympic</td>
<td>State Establishment «Minsk City Center of Olympic Reserve in Cycling»</td>
<td>Minsk</td>
<td>9</td>
</tr>
<tr>
<td>Reserve</td>
<td>State Establishment «City Center of Olympic Reserve in Glacial Disciplines»</td>
<td>Minsk</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Republican Center of Olympic Training in Tennis</td>
<td>Minsk</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>College of Olympic Reserve</td>
<td>Educational Establishment «Minsk State Regional College of Olympic Reserve»</td>
<td>Minsk</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Educational Establishment «Minsk State College of Olympic Reserve»</td>
<td>Minsk</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Sports School for Children and Youths</td>
<td>State Establishment «Minsk Regional Complex Specialized Sports School of Olympic Reserve for Children and Youths»</td>
<td>Minsk</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establishment «Minsk City School of the Highest Sportmanship»</td>
<td>Minsk</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establishment «Specialized Sports School of Olympic Reserve for Children and Youths in wrestling of the Department of Physical Training, Culture, and Tourism of Minsk City Administration»</td>
<td>Minsk</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establishment «Specialized Sports School of Olympic Reserve for Children and Youths in Track and Field «Athlete» of the Department of Physical Training, Culture, and Tourism of Minsk City Administration»</td>
<td>Minsk</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establishment «Specialized Sports School of Olympic Reserve for Children and Youths in Sports Gymnastics and Acrobatics of the Department of Physical Training, Culture, and Tourism of Minsk City Administration»</td>
<td>Minsk</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SSORCY №2 BFSO «Dinamo» in cycling</td>
<td>Minsk</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SSORCY in Fencing</td>
<td>Minsk</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SSORCY of Trade Union in Team Sports – handball</td>
<td>Minsk</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SSORCY in shooting DOSAAF</td>
<td>Minsk</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SSORCY of Trade Union in Wrestling and Taekwondo - judo</td>
<td>Minsk</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establishment «Specialized Sports School of Olympic Reserve for Children and Youths in Rhythmic of the Department of Physical Training, Culture, and Tourism of Minsk City Administration»</td>
<td>Minsk</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establishment «Sports School for Children and Youths in Skiing of the Department of Physical Training, Culture, and Tourism of Minsk City»</td>
<td>Minsk</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL IN Minsk</td>
<td>103</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL IN THE RESEARCH</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>