

ANNOTATION
to a dissertation work by Galiya Zhumabayeva on a topic
«Impact of anti-doping education and advocacy on a commitment to a healthy
lifestyle of athletes of the Republic of Kazakhstan»,
presented for a doctor degree (PhD) majoring
in the educational program 8D10101 – «Public Health»

Relevance of the topic:

The phenomenon of doping in sports is not limited with a small number of high-level athletes. It is an alarming trend that the use of substances prohibited under the World Anti-Doping Code is increasingly common among young athletes in recreational sport. The use of substances prohibited by the World Anti-Doping Code, both in amateur and professional sports, is a great concern regarding the consequences for society and public health. It is becoming a public health issue as doping use is associated with numerous health problems. In addition, sports values in a society shape the social norms associated with them for the use of illegal substances and vice versa. There is ample evidence that social beliefs determine the intentions and actual patterns of doping use among athletes and non-athletes of all ages.

The use of prohibited substances to enhance athlete performance is a key issue in sport, and there is much evidence that anti-doping rule violations are widely committed by athletes of all levels (young, amateur and elite athletes), intentionally or unintentionally. According to the literature, 3–12% of young athletes have used anabolic agents at some point in their career. In Kazakhstan 20% of all positive samples were among young athletes from 2013 to 2019. It should be noted that there are a number of effective educational programs aimed at preventing the use of illegal substances that increase performance, including the anti-doping programs of the US colleges ATLAS and ATHENA, the Swiss Cool & Clean program, programs in Iran, Sweden and Japan.

The anti-doping education program in Kazakhstan has never been described, as well as the impact of this program on athletes. Currently, no specific study has been conducted in the Republic of Kazakhstan to assess the impact of anti-doping education and advocacy on the commitment to a healthy lifestyle of athletes.

The purpose of the dissertation research:

To study the impact of anti-doping education and advocacy on the commitment of athletes of the Republic of Kazakhstan to a healthy lifestyle with the subsequent development of recommendations for their improvement.

Research objectives:

1. To study the impact of advocacy and anti-doping educational programs on the commitment to a healthy lifestyle of athletes in the world;
2. Describe the role and impact of advocacy and anti-doping education on modern sport in Kazakhstan;
3. To study the commitment of athletes to a healthy lifestyle;
4. Develop recommendations for improving anti-doping education.

Research methods: bibliographic, information-analytical, statistical, sociological.

Objects of the study: athletes of the Republic of Kazakhstan.

Subject of the study: the results of the survey of athletes of the Republic of Kazakhstan, obtained using the developed questionnaire, with a validated and adapted ALPHA test.

The main provisions of the work submitted for defense:

1. The social environment of an athlete influences the decision to use or not to use doping.

2. A high level of anti-doping knowledge develops commitment to a healthy lifestyle.

3. The developed model of anti-doping education can become the basis for a further comprehensive process of education for representatives of both professional and mass sports.

Description of the main results of the study:

- The results of the study were introduced into the work of the State Enterprise “National Anti-Doping Center” of the Committee for Sports and Physical Culture of the Ministry of Culture and Sports of the Republic of Kazakhstan. Acts on the implementation of the components of the anti-doping education model have been drawn up.

- The results of the study were implemented in the work of the Kazakhstan Cycling Federation. Completing the components of the anti-doping education model is a mandatory requirement for obtaining a license to participate in sports competitions.

- The results of the study were introduced into the work of the Weightlifting Federation of the Republic of Kazakhstan. Completing the components of the anti-doping education model is a prerequisite for participation in sports competitions.

- The results of the study were introduced into the work of the Kazakhstan Gymnastics Federation. Completing the components of the anti-doping education model is a prerequisite for participation in sports competitions.

- The results of the study are recognized and implemented by the Olympic Council of Asia. Completing the components of the anti-doping education model of the Republic of Kazakhstan is a prerequisite for participation in the Asian Games.

Scientific novelty of the study:

1. For the first time in Kazakhstan, an assessment of the level of anti-doping knowledge of athletes was carried out;

2. Statistically significant parameters affecting the level of anti-doping knowledge were identified;

3. The role of anti-doping education as a factor influencing public health is determined through the commitment of athletes to a healthy lifestyle;

4. Recommendations have been developed to improve anti-doping education in Kazakhstan.

Practical significance:

The obtained scientific data can be used as a basis for improving Kazakhstan anti-doping system in the development of commitment to a healthy lifestyle.

1. The introduction of anti-doping education at all levels of education and training of athletes will increase the likelihood of making a decision in favor to a healthy lifestyle.

2. Organization and support of initiatives aimed at raising awareness in every sector of public health in order to actively contribute to the prevention of doping in amateur sports.

3. The developed model of anti-doping education will allow a comprehensive educational process in the field of anti-doping, which is a great importance for public health.

Personal contribution of a doctoral student:

The doctoral student independently summarized and analyzed data from domestic and foreign literature on the problem under study. The PhD candidate conducted a survey, and also gave lectures and seminars with components of anti-doping education. The author personally developed the research design, analyzed, summarized and statistically processed the data, prepared materials for publication and material for practical implementation.

Conclusions:

1. The conducted information research allows us to draw conclusions about the positive impact of anti-doping activities and advocacy on the commitment to a healthy lifestyle of athletes both in the world and in the Republic of Kazakhstan. There is no single format of anti-doping education in the world. Existing formats cover target groups without taking into account continuity. The social environment of an athlete significantly influences the decision to use doping.

2. From 2013 to 2019, advocacy was one of the main tools to promote a healthy lifestyle among the country's sports community. The identification of positive samples is associated with the expansion of the KazNADC testing plan. The decision on the participation of athletes in the components of anti-doping education is due to the requirements of the IOC, NOCs and the direct desire of the leaders of sports organizations to ensure a high level of anti-doping knowledge of an athlete. There is no system or model of anti-doping education in the Republic of Kazakhstan.

3. Athletes' adherence to a healthy lifestyle was assessed using a questionnaire developed by us, including a validated and adapted into the Kazakh language - ALPHA test. According to the results of the study, in 49.2% of cases, the primary source of information about doping was the athlete's social environment, while Internet resources - in 46.9% of cases. Having experience in anti-doping education components increases the likelihood of a participant choosing the correct answer to the questions of the ALPHA test by 2 and 4 times, which may suggest that the athlete makes the right decision regarding doping. Participation in anti-doping education components increases the likelihood of quitting bad habits, in particular with regard to smoking, with statistical significance ($p=0.002$).

4. There was developed and proposed a model of anti-doping education based on the statistically significant results identified in this study. The model includes the following main elements: anti-doping education for specialized sports

schools, for higher educational institutions and for sports federations and organizations; online anti-doping education (e-learning).

Approbation of the research:

The main provisions of the work were reported and discussed in the form of scientific reports:

1. International Congress "The IX Annual International Scientific-Practical Conference "Medicine Pressing Questions™"" (Baku, Azerbaijan).

Publications:

Based on the results of the study, four papers were published on the topic of the research, including 3 papers - in publications recommended by the Committee for Quality Assurance in Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan, 1 article in a journal included in the Scopus international database (Substance Abuse: Treatment, Prevention, and Policy, Q1, 78 Percentile: «Knowledge and experience of Kazakhstan athletes in anti-doping and the impact of past educational intervention», Zhumabayeva et al. BMC Substance Abuse: Treatment, Prevention, and Policy 17, 32 (2022). <https://doi.org/10.1186/s13011-022-00461-7>), 1 publication in the materials of foreign conferences. Doctoral student received 1 certificate on state registration of rights to the copyright object "Model of anti-doping education".

Scope and structure of the dissertation:

The dissertation is presented on 91 pages without appendices, consists of an introduction, main part, conclusion and a list of references. The dissertation has 5 appendices. The list of references includes 140 sources in Russian and English. The work is illustrated with 21 tables and 19 figures.