Dope in sport as research topic (Russian contributions review)

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Abstract: In 2014, the anti-Russian doping scandal led to the squeezing of Russia from the ranking of world sports powers. Sport became an arena of competition without rules. Materials and methods. The article analyzes the research data published and presented in the Russian scientific electronic library since the start of the doping scandal in 2014 to the present. General theoretical methods and comparison are used. Results. The study of the works subjects revealed their key areas: medical-biological, legal and psychological-pedagogical. It is shown that in medical research a classification of means and methods for increasing physical performance is given, risk factors and consequences of doping are assessed. They are included in the context of post professional health and rehabilitation. It is revealed that publications in the field of law designate a complex of legal problems in connection with the use of pharmaceuticals in sports. It outlines the range of persons who are legally responsible for the use of doping. The need to develop special branches of sports law as well as sports medical law is emphasized. The question of developing anti-doping legislation in the Russian Federation is raised. It is shown that in the psychological and pedagogical works of domestic authors, the undeveloped subjects of the doping use are noted. The necessity of reformatting the system of athletes and coaches special training is considered. The problem of children's sports and socialization of the younger generation is being actualized in the context of the fight against the use of doping. Conclusion. In the Russian publications the discussed subjects were on the periphery of scientific thought. Therefore, they did not receive a thorough and comprehensive development with a system analysis of current problems. The methods of overcoming the negative situation taking shape in the Russian Federation are adequately reflected. It was another confirmation of the fact that the country was not ready for a massive discrediting of Russian sports by Western media.

Keywords: dope, high-level sport, data analysis, medical-biological research, quality of legal research, psychological and pedagogical researches, defamation, reverse the situation.

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Introduction
Began with the film, Hyo seppelt the anti-doping scandal (German broadcasting channel ARD, 2014) [1] was the trigger to extensive discrediting of the national sport and Russia from the ranking of the world's sporting powers. Launched by Western media anti-Russian hysteria "lifted" the curtain of the world sports "behind the scenes" and became the arena of competition not just by all possible means, but without rules [2].

Materials and Methods
Search system "Yandex" in the peak of interest in doping issues (in January 2018 – before the winter Olympics in Pyongchang) gave 79 million results and 7791 displays per month. A scientific electronic library "ELIBRARY.RU "at the request of" doping in sports " in the period from 2014 to early 2018 – more than 200 publications (266). Note, if in the previous twelve years (2001-2013) in the Russian segment of the electronic scientific library were published three times less articles (83), for the period from 1990 to 2000 – thirty times (9). In this regard, we draw attention not to the increased interest in the issue from the
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The aim of the study is to identify the subject and focus of scientific analysis in the works of the authors researches published in the Russian electronic library for the period from 2014 to 2018 on the problem of athletes doping. Achieving this goal requires the following tasks: to study the main topics of published works; to consider the key conclusions of the research authors; to highlight the direction of the analysis in the works of the authors on the problem of doping in the sports field. In the course of the work, general theoretical methods were used, as well as comparison and contrast.

Results and Discussion

Since the subject of doping is one of the key to the sport of higher achievements, the medical and biological research of athletes' health is put forward to the fore.

Numerous references to the desired definition formulate the concept of "doping". They also find out its sports crime. Improvement of performance is considered as "pharmacological agents, prohibited methods aimed at artificial enhancement of physical activity and endurance during sports competitions" [3]. Since 2016, the Russian Federation has officially recognized the definition of doping as "the presence of a prohibited substance, or its metabolites, or markers in a sample taken from an athlete" [4].

The researchers point and extended phrase, and the definition of the WADA code. For example, E. P. Evseev analyzes doping as "an organic or inorganic substance in a solid, liquid or gaseous state, introduced into the body of an athlete in any way-orally, rectally, by intravenous or intramuscular injections, through the skin, etc., providing: increase of sports results in excess of the norms characteristic of the means and methods of the training process; harm to health of the athlete, both at single, and at continuous use with excess of the dosage norms established by medical science" [2]. Lyubimov concludes that the concept of "doping" in its most generalized form should include medical, psychological, moral, pedagogical and social aspects [3].

In addition to the classification of doping [4], scientists raise the issue of the specific pharmaceutical products use, such as anabolic steroids (as), including their impact on the health of athletes [5].

Among the "side effects" as some authors consider "inhibition of the gonadal regulatory circle, salt retention, cardiovascular disorders, the phenomenon of feminization, changes in the fat content of the skin, baldness, the phenomenon of virilization, growth retardation, mental changes, gastrointestinal disorders, weakening of the immune system" [9,34].

L. Gunina emphasized that "despite the marked increase in sports results when using anabolic agents, the harm they cause to the athlete organism in the short and especially long term is extremely high" [6,8].

Researchers pay attention to the use of various types of stimulants. For example, O.A. Brusnikina and A.N. Peskov indicate amphetamine, which when long-term use "cumulates, develops drug dependence" [7].

In addition, there is a question about the use of natural nutritional supplements (dietary supplements). The authors note that dietary supplements "do not belong to drugs and, therefore, do not undergo strict clinical trials. They are often produced even without an accurate description of the ingredients used in their production. They are freely and uncontrollably sold on the Internet" [7].

In the context of anti-doping scandal circumvented the issue of hormones use [8], beta-blockers (propranolol, atenolol, metprolol) [9], diuretics (dihlotiazid, hydrochlorothiazide) purchase [3] and drugs is considered [10].

Besides, "possibility of the preparations application negative effects influence forbidden by the anti-doping Commission during sports career on the process of ex-athletes postprofessional adaptation" is discussed [11; 12].

At the same time, scientists are interested in biomedical control in sports. Data on changes in the
state of organs in athletes of various specializations using "dopplerography, echocardiography, magnetic resonance imaging" [12] are presented, "the risk of sudden death" is analyzed [13,35].

Thus, for the specified period the presented medical and biological researches, first, outline the list and carry out classification of means widely used in sports and methods of results achievement; secondly, explain a situation with influence of pharmaceutical preparations on health and quality of athletes' life; thirdly, estimate risk factors and consequences of doping application; fourth, carry out the comparative analysis of the known cases of improvement by athletes (both foreign, and domestic) efficiency in practice of various level competitions; fifth, the doping problem is considered in the context of post-occupational health and rehabilitation.

On the one hand, along with biomedical research, legal research is of great interest to scientists. In this regard, the responsibility of trainers (mentors) and medical personnel for the use of doping by athletes is analyzed [14,15]. For example, Kudashova I. V. focuses on the issue of administrative responsibility for the violation of anti-doping rules by the coach, revealing the peculiarities of the decision execution on his disqualification [16]. On the other hand, the actions of the athletes themselves are discussed [17].

Attention is drawn to the formulation of legal problems and unresolved issues set in the fight against doping [18,19]. So, Evteev S.P. rightly notes that "this problem is not completely solved from the legal side, since the legalized system of penalties for the use of doping drugs in the international sports movement, and in some countries... or is not sufficiently effective, or is absent at all" [19]. Russian legislation "contains a number of regulatory legal acts aimed at preventing and suppressing the use of doping in sports". However, according to the scientist, many articles "need either changes and additions in accordance with the legislation of the Russian Federation, or cancellation of the action" [19].

In the context of the scandal, the issue of the so-called "intentional" and "unintentional" offense is raised [20]. For example, M. G. Vulakh notes that the terminology of these offenses is inadequate "for the theory of Russian administrative and criminal law" and causes "an urgent need for the development of anti-doping legislation in Russia". The author suggests that "the relationship of a citizen (athlete) and the state should be based on the principle of mutual responsibility of the parties", and "the use of doping by athletes is controversial in the aspect of their compulsory testing" [20].

Researchers in the field of law systematically raise the question of the justification, development and adoption of measures for inducing doping [10; 14]. For example, O.A. Seredkina considers that the introduction of criminal liability will "force coaches and doctors not only to force the athlete to use doping, but also to carefully monitor their wards" [10].

In addition, the punishment for such crimes is toughened: from increasing the fine "to 300 thousand rubles or in the amount of six-month income of the accused", as well as "a ban on professional activities for up to three years" to "restriction of freedom for up to one year". Moreover, "if the doping against the athlete was applied without his consent, then for this crime he will be punished by a fine of up to 1 million rubles or in the amount of two-year income of the perpetrator. It is also possible to punish in the form of freedom restriction for up to two years and prohibition to engage in professional activities for up to four years" [10].

Legal publications deal with a difficult law enforcement practice used as doping substances considered according to the criteria as forbidden [21]. In works for the specified period the criminological assessment of doping turn in the sports sphere is presented [22]. The issue of international cooperation development in the field of anti-doping is not bypassed [23]. In addition, the issues of "improving the legislation on sports, the fight against the politicization of sports, the development of sports as prevention of bad habits, improving the system of training, prevention of sports hooliganism, improving the effectiveness of the fight against doping, the protection of the athletes rights at the international level, the development of sports as a means of raising children, etc." are raised [24]. The problem of sports medical law formation is actualized [25].

Thus, studies in the field of law, first, outline the circle of persons legally responsible for the use
of doping. Secondly, they indicate a set of legal problems in connection with the use of pharmaceuticals in sports (including a system of penalties for their use). Thirdly, the problem of the special branches development: sports law and sports medical law is actualized. Fourth, the terminology of offenses in sports activities are considered. Fifth, there is a problem of developing anti-doping legislation in the Russian Federation (including the introduction of criminal liability). Sixth, the law enforcement practice of narcotic and other prohibited substances use in sports activities. Seventh, they set the task of developing international cooperation in the fight against doping is indicated.

In the psychological and pedagogical works published by authors for the specified period "the importance of carrying out researches for athletes psychological features identification between type of the personality and the relation to the use of the forbidden stimulating substances" is noted. Scientists note that in Russia "not enough experience of large-scale psychological research aimed at systemic identification of conditions and factors causing the problem of doping mass use in the sports environment." In addition, it is stated that "the shortage of domestic scientific and psychological developments on doping issues is one of the reasons that the number of Russian athletes caught in the use of doping is not significantly reduced" [26,27]. The reasons for the spread of doping are determined by the environmental factor (including "a high level of moral legitimacy of doping among athletes, the ideology of forced use of doping, confidence in the usefulness of doping, the self-assertion factor" [28,37,38]), as well as individual psychological characteristics of athletes (including the gender aspect) [35,36,39].

The works also touch upon the subject of anti-doping education [28], and formation of anti-doping consciousness [29] both in the sports field and in society as a whole. The general psychological problems of the Russian sport [30], including children's are revealed [31]. The personnel issue is raised [32,33].

Thus, psychological and pedagogical research, firstly, reveal the undeveloped themes of doping in the psychological and pedagogical works of domestic authors. Secondly, the great importance of individual psychological factors in doping are revealed. Third, they consider the need to reformat the system of athletes and coaches special training. Fourth, the problems of children's sports and socialization of the younger generation in the context of the fight against doping are actualized.

Conclusion

Foreign policy conditions and the problem of Russian athletes participation in the international competitions actualized doping topics in the works published in recent years in the Russian segment of the scientific electronic library. The publications confirmed the lack of the themes in biomedical psycho-pedagogical and legal studies. With the proliferation of doping scandal ideas for the prevention of doping behaviour were developed. And also responsibility for its use increased. The scope of work on the use of certain means and methods of improving sports performance expanded. The main issues of joint international cooperation in the whole range of scientific areas related to the use of doping in the sports field are outlined.

The literature review showed that scientists were not fully interested in the discussed topics. Those topics were on the periphery of scientific thought. Apparently, that is why it has not received a deep and comprehensive development of the current problems system analysis. Methods of overcoming the negative situation in the Russian Federation in the fight against doping are not adequately reflected. This is another confirmation of the fact that the country was not ready for the massive discredit of Russian sports by the Western media.

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