

Reflections on Sports for All Bodybuilding Participants and Doping

Sang-Hyun Lee*

* *Researcher, Sports Science Institute, Dankook University, Korea*
goodaids@nate.com

Abstract

Physical education bodybuilders compete by means of external appearance, and more and more people are starting bodybuilding with an interest in improving their individual constitution and diet. However, some of the bodybuilders in sports for life started using banned substances to show off their appearance or to expect good results in bodybuilding competitions. Prohibited drugs only have a short-term positive effect on the subject, and the seriousness of side effects was greater when taking the drug for a long time. An education program that can provide professional education and information on drugs to bodybuilding athletes for life sports should be preceded, and a system that can check regular health should be introduced if necessary. A periodic doping education program for bodybuilders for sport for life is needed to focus on the positive changes in bodybuilding through banned substances and to educate and understand the side effects and damage to life that occur later. Therefore, in order to prevent doping, it is essential to educate various aspects of doping, and it is required to expand the scope not only to elite athletes but also to participants as sports for all

Keywords: *Bodybuilding, Drugs, Doping, Sport for All*

1. Introduction

Physical activity provides vitality and worth in daily life and provides opportunities to make the mind and body healthy in terms of social and environmental aspects [1]. Participation in continuous physical activity is effective in improving not only physical health but also psychological health [2-3], and additionally improves subjective well-being and quality of life.

Social interest in health is increasing as the consumption attitude that values one's happiness increases, especially among young people. Young people are investing a lot of time and effort in extrinsic factors along with nutritional information and weight management as life expectancy increases [4].

Participant in bodybuilding sports for all means a person who has experience in participating in sports aimed at developing the muscles of the body in a balanced manner using dumbbells, barbells, and various exercise

Manuscript Received: June. 27, 2023 / Revised: July. 5, 2023 / Accepted: July. 9, 2023

Corresponding Author: goodaids@nate.com

Tel: +82-041-550-1345, Fax: +xx-xx-xxx-xxxx

Resercher, Sports Science Institute, Dankook University, Korea

equipment. Bodybuilding is an exercise that aims to build a muscular body with low fat by managing weight training and nutrition intake. As a sport that competes for the beauty of well-trained muscles, it has spread worldwide and has international professional players.

According to the National Statistical Office, among the sports events desired by adults, bodybuilding, that is, health events, was investigated as the most popular event. Korean society is highly interested in appearance, and building strong muscles and slim bodies is gaining popularity among young people [5].

In addition to the bodybuilding craze, ordinary people and club members are making efforts to improve their bodies through bodybuilding. As a result, the number of sports bodybuilders participating in the competition has increased significantly. However, there are cases that focus on external appearance change and harm health. According to a recent press release, illegal steroid misuse is intensifying and the number of cases of illicit steroid smuggling has tripled in the past three years.

It is a prevalent issue in amateur bodybuilding and fitness events, and now there are reports that drugs are used in physical college entrance exams and police promotion exams beyond these two events [6]. In addition, the Korea Anti-Doping Agency (KADA) provides doping education only to elite athletes and their coaches, and there is a lack of doping education for amateur athletes, club members, and sports coaches.

The World Anti-Doping Agency (WADA) defines doping as “the act of taking prohibited drugs, injections, or special physical treatment in order to improve physical strength and achieve good results in athletics.” Bodybuilding has already had a stigma about doping for a long time, and when doping was discovered by KADA in 2019, it was demoted as a demonstration event at the National Sports Festival. In addition, research showing that bodybuilders have a more tolerant attitude towards doping than athletes in other sports [7] supports the perception that doping is prevalent in bodybuilding.

Several bodybuilders are sounding the alarm about the indiscriminate use of performance-enhancing drugs by confessing to having used them in the past and that they now suffer from side effects. The drugs most used in bodybuilding competitions are anabolic steroids, and drugs such as insulin, growth hormone, and ephedrine are commonly used. If these ingredients are misused, they cause fatal side effects. In addition, if the injection is used without sufficient education, there is a risk of tissue necrosis due to infection.

Previous studies have pointed out the personality traits of individual athletes as the main cause of doping. However, in addition to personality traits, drugs were used for reasons such as strong extrinsic rewards or health problems. On the other hand, when youth elite athletes were surveyed on doping attitudes, 45% of the total respondents answered that they would doping for physical reasons [8]. This suggests that doping is done not only for psychological reasons, but also for physical reasons. In addition, it has been found that anabolic steroids are used for the purpose of improving appearance [9], and appearance and weight loss have been cited as reasons for athletes using drugs [10].

So far, studies have focused only on identifying the cause of doping and were limited to elite athletes or their coaches who receive sufficient doping education. However, considering that many of the participants in bodybuilding competitions are athletes for life, the need to expand the scope of doping education is urgently required. In addition, by providing doping education to potential bodybuilders who participate in weight training or complex physical exercise, the relationship between doping attitude and doping intention will be clearly identified.

2. Bodybuilding Competition

Bodybuilding is an effective exercise for diet and muscle building by increasing muscle strength and muscle mass using dumbbells, barbells, and machines, and increasing energy consumption of the body [11]. Since bodybuilding is an event that mainly evaluates external aspects such as overall muscle development, balance, and body beauty, the desire of contestants to improve their appearance is inevitably more prominent than other events.

In bodybuilding competitions, the athletes' natural beauty (balance and harmony of muscle mass) and free poses. It is a competition that divides the rankings by judging the seven prescribed poses of the International Bodybuilding Federation (IFBB). Since the International Federation of Bodybuilding (IFBB) was formed in 1946, world competitions have been held every year [12], and the first national bodybuilding competition in Korea was the 1st Mr. Korea Contest held in 1949 at the Seoul City Hall.

Afterwards, Korea joined the Asian Bodybuilding Federation (ABBF) in 1970, and in June 1987, the Korea Bodybuilding Federation was created by separating from the existing weightlifting federation. Bodybuilding was played as a demonstration event at the National Sports Festival in 1990 and 1991 and was adopted as an official event at the 72nd National Sports Festival in 1992.

3. Doping and Prohibited Substances

The IOC Anti-Doping Committee defined doping as a fraud in which a particular competitor or competition organization uses drugs, physical methods, or any other means to alter the physiological or physical ability of a competition. Doping refers to cases in which it is artificially or unfairly used only by an abnormally large number of things or a healthy person in an abnormal way to improve their ability to play, even if it is completely abnormal or physiological in the human body, and the same is true according to psychological methods.

In addition, in accordance with illegal and unfair methods for the purpose of improving athletic performance, special the act of ingesting a substance is defined as doping and is prohibited by the Organizing Committee of various international competitions, including the International Olympic Committee (IOC).

In the Korea Anti-Doping Agency, all pharmacological substances that are not included in any classification on the list of prohibited substances and are not currently approved for use by health organizations under each government for therapeutic purposes (ex: drugs that have been discontinued during or before clinical development, approved drugs for animals, and synthetic drugs) are always prohibited. These prohibited substances are regulated through blood doping, pharmaceutical, chemical and physical manipulation.

Prohibited substances are largely divided into anabolic agents, peptide hormones and growth factors, beta-2 agonists, hormone and metabolic modulators, diuretics, and other masking agents.

Table 1. IOC, KADA Banned Doping Agents

Type	Effect	Representative drug
Stimulant	Reduces anxiety and excites the mind increase agility	amphetamine, ephedrine, cocaine, etc.
Narcotic		
Muscle enhancer	Eliminates fatigue and pain and relaxes the body	testosterone enanthate, nandrolone, etc.
β - blockers	Suppresses heart palpitations and tremors	atenolol, nadolol, amiloride, loop, etc.
Water pill	Losing weight or reducing residual drug levels in the body lower	Diuretics, etc.

4. The reality of doping in athletes participating in bodybuilding sports for all

Common characteristics of bodybuilding participants in life sports as a feature, there were many cases of using drugs to prevent muscle loss, and they accepted the drugs used in the past without difficulty and said that they would continue to use prohibited drugs in the future.

According to previous research [13] found that 63.8% of the total subjects were willing to continue to use drugs in the future because bodybuilders in sports for life were satisfied with their performance in the past through drugs. In addition, in many studies, it has been investigated that general life athletes take drugs to satisfy their needs, not to take drugs for competition.

As above, it shows narcissistic psychological characteristics that are satisfied with one's appearance in past drug use behavior. This is obsessed with the idea that the drug has helped her positive past changes and has a vague idea that it will bring positive changes to herself in the future. Recently, there were 157 cases of doping detection in Korea, and 115 cases, or 73.2% of them, were the highest in bodybuilding events.

For young athletes, drugs are considered as a means to have a beautiful body in a short time [14]. As such, players are becoming more and more sophisticated in taking the wrong drugs and how to use them, and controversy over the ethical issues of players related to the nature of sports is increasing.

It is not easy to find data or case data on drugs in the case of bodybuilders in sports for life. However, in this regard, the total number of illegal distribution of drugs, including muscle growth drugs, was 22,955 in 2017 and 21,596 in 2018. In addition, bodybuilders who want to purchase drugs can easily access them through internet cafes or applications.

5. Conclusion

Physical education bodybuilders compete by means of external appearance, and more and more people are starting bodybuilding with an interest in improving their individual constitution and diet. However, some of the bodybuilders in sports for life started using banned substances to show off their appearance or to expect good results in bodybuilding competitions.

As for the reasons for using prohibited substances, bodybuilding participants in sports for life continue to use drugs due to a sense of superiority, confidence, and changes in external appearance.

Sports for all bodybuilding athletes can solve short-term positive changes and their needs through banned drugs, but if this situation persists, they tend to not think in-depth about the increase in drug volume and side effects and side effects. They did not share their positions on negative changes and tried to hide the fact that

they were exposed to drugs as much as possible.

Participants in the bodybuilding of sports for all tend to rationalize the use of banned drugs due to their desire to develop into a better body and expectations for success. This part can be said to be an important implication found in this study. Among all-sports bodybuilders, the use of banned substances as an essential condition for part of their exercise performance is generalized by overlooking too long time to be treated as a short-term phenomenon.

Sport for all bodybuilders' bodybuilding through SNS activities and participation in bodybuilding competitions served as a link to keep using banned substances. In other words, the wrong perception that bodybuilding participants in life sports must use drugs to achieve results in competitions should be eliminated. To this end, state-led plans and measures must be prepared, and a change in awareness must be made so that a cultural consciousness is formed through a periodic doping education program for bodybuilders in general sports to participate in the competition.

Prohibited drugs only have a short-term positive effect on the subject, and the seriousness of side effects was greater when taking the drug for a long time. An education program that can provide professional education and information on drugs to bodybuilders in sports for life should be preceded, and a system for regular health checks should be introduced if necessary.

A periodic doping education program for bodybuilders for sport for life is needed to focus on the positive changes in bodybuilding through banned substances and to educate and understand the side effects and damage to life that occur later. Therefore, to prevent doping, it is essential to educate various aspects of doping, and it is required to expand the scope not only to elite athletes but also to participants as sports for all.

References

- [1] J. Y. Jang, "Comparison of physical self-concept and mental health according to dance sports participation type", *Journal of the Korean Society for Developmental Development*, Vol. 24, No. 3, pp. 299-305, Aug 2016.
- [2] R. Bize, JA. Johnson, RC. Plotnikoff, "Physical activity levels and health-related quality of life in the general adult population: a systematic review", *Preventive Medicine*, Vol. 45, No. 6, pp. 401-415, Dec 2007.
DOI: <https://doi.org/10.1016/j.ypmed.2007.07.017>
- [3] M. Teychenne, K. Ball, J. Salmon, "Physical activity and depression in adults: a review", *Preventive Medicine*, Vol. 46, No. 5, pp. 397-411, May 2008.
DOI: <https://doi.org/10.1016/j.ypmed.2008.01.009>
- [4] W. Y. Choi, H. W. Kang, "A study on banned substances, formation of narcissism, and behavioral intention in bodybuilders in sports for all", *Korean Journal of Sports Science*, Vol. 30, No. 2, pp. 77-91, April 2021.
DOI: <https://doi.org/10.35159/kjss.2021.4.30.2.77>
- [5] Y. S. Choi, W. Y. Lee, "A study on the body building experience of female bikini athletes: Exploring post-feminist approaches to building a beautiful body in modern society" *Journal of the Korean Society of Physical Education*, Vol. 58, No. 1, pp. 29-41, Jan 2019.
DOI: <https://doi.org/10.23949/kjpe.2019.01.58.1.3>
- [6] K. H. Han, B. S. Kim, "Hormone drug knowledge and market formation: synthetic hormone use and consumption by athletes", *Journal of Science and Technology*, Vol. 14, No. 1, pp. 87-116, June 2014.
DOI: <https://doi.org/10.5657/kfas.2014.0882>
- [7] R. Brand, P. Heck, M. Ziegler, "Illicit performance-enhancing drugs and doping in sports: a brief picture-based implicit association test to measure attitudes in athletes", *Substance Abuse Treatment, Prevention and Policy*, Vol. 9, No. 1, pp. 1-11, Jan 2014.
DOI: <https://doi.org/10.1186/1747-597x-9-7>

- [8] M. Zabala, J. Morente-Sánchez, M. Mateo-March, D. Sanabria, “Relationship between self-reported doping behavior and psychosocial factors in adult amateur cyclists”, *The Sport Psychologist*, Vol. 30, No. 1, pp. 68-75, Feb 2016.
DOI: <https://doi.org/10.1123/tsp.2014-0168>
- [9] A. Petroczi, “The doping mindset—Part I: Implications of the functional use theory on mental representations of doping”, *Performance Enhancement & Health*, Vol. 2, No. 4, pp. 153-163, Dec 2013.
DOI: <https://doi.org/10.1016/j.peh.2014.06.001>
- [10] R. Weinberg, J. Butt, “Goal-setting and sport performance”, *Routledge companion to sport and exercise psychology: Global perspectives and fundamental concepts*, London: Routledge, pp. 343-55, Dec 2018.
DOI: <https://doi.org/10.1093/acrefore/9780190236557.013.152>
- [11] G. G. Kim, “Influence of Weight Training and Circuit Training Program Participation on Body Composition and Physical Fitness”, *Journal of Sport and Leisure Studies*, Vol. 17, pp. 137-144, May 2002.
DOI : <https://doi.org/10.51979/KSSLS.2002.05.17.137>
- [12] O. C. Hwang, S. J. An, “Past, Present and Future of Bodybuilding in Korea”, *Korean journal of physical education*, Vol. 43, No. 6, pp. 43-52, Nov 2004.
- [13] G. J. Seo, Nutrient supplement intake and drug intake of bodybuilders. Master. Thesis. Korea University Graduate School of Education, Korea., 2010.
- [14] K. N. Kwon, E. J. Song, C. B. Park, “Male high school bodybuilders' drug choice: Focusing on Elster's rational choice theory”, *Journal of the Korean Society of Sports Sociology*, Vol. 20, No. 2, pp. 301-313, Aug 2007.
DOI: <https://doi.org/10.22173/jksss.2007.20.2.301>