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Original Article

A qualitative analysis of motivations for anabolic androgenic steroid use among non-competitive bodybuilders in the Czech Republic

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Abstract:

Antidoping researches are focused especially on organised sports. The question of doping in gyms is rather specific, resulting in some non-competitive athletes abusing certain drugs. The present quantitative study focuses on evaluating the motivations behind the first and the following anabolic androgenic steroid (AAS) abuse, which may however also have an impact on the athletes ceasing to abuse AAS. The respondents under evaluation were 14 non-competitive bodybuilders who have admitted using AAS. They were male from three gyms in the Usti Region in Czech Republic. The study revealed that the major motivations behind the first use of AAS include the need to be admired and/or respected, dissatisfaction with one's body, impatience in training, curiosity, excitements and other external factors. Such other factors were likewise stated in motivations leading to further use of these substances. They include positive changes in body structure, an increase in self-confidence, increased interest on the part of other people, but also a temporary decrease in muscle mass, in physical strength, as well as a subjective feeling of a decreasing "firmness of the body". Possible reasons for a potential discontinuation of AAS use include fear of health risks, of being revealed, and the high financial costs. **Key words:** motivation, anabolic androgenic steroids, non-competitive bodybuilders.

Introduction

Triathlon Drug abuse is a serious problem of today's society, resulting in a range of social as well as health issues. For these reasons, many researchers analyse not only the prevalence and health risks of drug abuse but also its reasons. These include genetically-based proneness and certain individual personality traits, as well as an individual's subjective health problems, strengthened by the influence of social setting and upbringing (e.g. Comasco, Berglund, Oreland, & Nilsson, 2010; Orsi, Brochu, Lafortune, & Patenaude, 2014), a low degree of self-esteem, emotional instability, or the search for "a certain excitement" (e.g. Becoña et al., 2012; Creemers et al., 2015).

Issues linked to sports to which the drug abuse is related can vary. Cases revealing unethical, dopingbased improvements to an athlete's performance are observed with immense interest on the part of researchers as well as the general public. The topic of doping has developed into a widely known symbol of the negative part of professional sports (e.g. Engelberg & Skinner, 2016; Sari, 2010). Enormous efforts are made in a number of methods of prevention as well as repression, aiming to eliminate this phenomenon (e.g. Fogel, 2013; Overbye, 2016). Nevertheless, these efforts often fail to take into account a certain specificity of sports. The issue of doping is only linked to individuals engaging in organised sports, disregarding the possible involvement of doping in non-competitive sports activities. Probably, some doping substances or drugs are the most widely used by non-competitive athletes in the environment of gyms. In these cases, the drug abuse is not motivated by aiming to reach performances enabling the individual to win in a sports contest. Individuals do exercise for health reasons, but even more often in order to reach a socially attractive, athletic appearance of their figure. They attend various fitness centres, usually aiming to modulate their bodies, i.e. building larger muscles in some parts of the body, and decreasing the amount of fat. Unfortunately, apart from physical exercise, they often use ancillary substances to facilitate the process. Among the most serious substances there are mainly AAS (e.g. Alguraini & Auchus, 2018; Darke & Torok, 2014; Frati, Busardo, Cipolloni, De Dominicis, & Fineschi, 2015; Santos & Coomber, 2017).

These drugs produce a range of desirable effects on the body, but only in their physiological amount. However, athletes increase this amount considerably when administering them orally or by injection. The reason for this is naturally the improvement of their performance during sports. In some professional athletes, AAS allow for a more rapid regeneration of the organism when tired, while also increasing aggression, which is desirable in some, usually contact, sports. Also, they support the growth of muscle tissue and decrease the amount of fat tissue, much needed in some speed/power-oriented sports, but also in disciplines in which the

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decisive factor in reaching victory is weight or symmetry, beauty of the presented body (Griffiths & Murray, 2016). And some of these effects are taken advantage of even by non-competitive bodybuilders in fitness gyms. A number of studies, mostly conducted in economically advanced states, focuses on this problem, in particular on the prevalence and health effects of AAS use. Relatively high numbers of users have been found among the groups of these non-competitive athlete under examination (e.g. Dunn & White, 2011; Hakansson, Mickelsson, Wallin, & Berglund, 2012; Jampel, Murray, Griffiths, & Blashill, 2016; Kanayama & Pope, 2018). In some countries, this trend likely has a growing tendency (e.g. Lader, 2015). Health risks of AAS use have been confirmed, many of them highly serious. Above all, they include damage to liver functions, the vascular system or the brain, as well as impotence in men or the development of typically male features (a coarser voice, body hair) in women (e.g. Maravelias, Dona, Stefanidou, & Spiliopoulou, 2005; Pyšný, 2002; Zahnow et al., 2018). AAS use also changes an individual's psychological functions, triggering sleep disorders, mood swings and serious conditions related to anxiety or increasing aggression (Morrison, Ricci, & Melloni, 2015; Pope et al., 2013). Unfortunately, methods of prevention as well as repression, as conducted by anti-doping institutions, are non-existent in the non-competitive environment. Thus, gyms represent a highly specific realm of sports. Gym visitors, being non-competitive athletes, cannot be subjected to doping checks. Moreover, they often encounter further influence supporting AAS use. Illegal distribution of AAS may also occur in gyms with other gym visitors or gym-owners engaging in it. If these non-competitive bodybuilders decide to use AAS, their motivation does not stem from the effort to win a contest. Rather, they aim to become socially respected and admired while developing an "ideal male body". Other motivations include self-esteem, dissatisfaction with one's body, as well as the effort to slow down the aging process (e.g. Parent & Moradi, 2011; Petersson, Bengtsson, Voltaire-Carlsson, & Thiblin, 2010; Pyšný, 2006; Tahtamouni et al., 2008). Another important factor is probably psychological dependency with body image pathology, and in long-term AAS use also the development of muscle dysmorphia (Greenway & Price, 2018; Grogan, Shepherd, Evans, Wright, & Hunter, 2006; Kanayama, Barry, Hudson, & Pope, 2006; Kimergård, 2015; Papp, Urbán, Czeglédi, & Babusa, 2013; Santos & Coomber, 2017).

The present study aims to reveal the motivations which lead non-competitive bodybuilders, attending selected fitness centres in the Czech Republic, to the first AAS use, subsequent use, and potentially also the termination of AAS use.

Material & methods

Participants

The respondents under examination were 14 male non-competitive bodybuilders between 19 and 34 years of age (the average age being 24) who attend gyms regularly in order to form a muscular figure. In anonymous interviews, our respondents admitted having used AAS long-term, i.e. above one year (2.5 years on average). At the same time, all respondents stated that they aim at a "specific" diet with an increased protein intake, further enhanced by weight-gain supplements.

Procedure

Having good knowledge of the issue under examination as well as of the environment of gyms, we were able to conduct our research gathering data adequately. The present research was conducted in three selected fitness gyms in the Usti Region. The first author has been acquainted with the environment of gyms for over 30 years; being a sports physician, he collaborates with a number of bodybuilders and powerlifters of all performance levels. At the time of conducting the interviews, we had known the respondents for a minimum of several weeks. After their instruction with the issue under examination and the anonymity of the interview, 14 individuals agreed to participate in a semi-structured interview containing 14 question areas. *Data collection*

The respondents' motivations were evaluated qualitatively, based on recommendations resulting from the records of the semi-structured interviews (Braun & Clarke, 2006; Creswell, 2014; Silverman, 2016; Strauss & Corbin, 2015). The obtained data were analysed using thematic analysis. After transcribing and familiarizing ourselves with each interview, we performed its coding. First, we analysed and categorised specific statements that signify the area of interest. Subsequently, the codes were unified, refined and compared. These codes were grouped into 3 realms (Figure 1). These comprised the motivations for the first use, further use, and presumed motivation which may result in discontinuing AAS use. The resulting commentary is presented in the result part of the study, together with the characteristics of the findings.

Results

Motivations for first AAS use

All the male respondents stated that they had been exercising in the gym for a minimum of several months before the first AAS use. Their first use was motivated by the following factors.

Desire to be admired

The majority of respondents stated the desire to be admired by people around them as one of the major motivations. Six individuals admitted that they were motivated by the effort to gain admiration in their social environment (workplace, school), e.g.: "I wanted to walk along the street knowing that others are watching me

because I have an athletic body". In four cases, the goal was also to become sexually attractive for women, e.g.: "I work in an all-female team and as an athlete I would be more likely to succeed with them" or "I wanted to increase my muscles so that when I go swimming in summer I can catch the attention of girls who I fancy".

Dissatisfaction with one's body

Seven respondents described dissatisfaction with their bodies as the motivation for exercise as well as for the subsequent use of AAS. Three of them had been ridiculed for their weak bodies, e.g.: "Ever since I was a child, everyone was laughing at me for my weak physique. I was waiting for my muscles to grow – then they would never dare to mock me and they'd be impressed..." or "As early as secondary school, our PE teacher would make fun of me, so I resolved to become muscular and strong... I wish I met him somewhere these days". Two athletes gave their being short as the principal reason, e.g.: "I may be short but I have muscles now and I've become a proper man".

Impatience in training

Five individuals stated impatience during training as a motivation for AAS use. They had been doing exercise long-term but were observing no major changes, e.g.: "I was going to the gym for over a year a couple of times a week, and nothing was growing". At the same time, three of them observed salient improvements in their fellow gym visitors, and thus decided to support their training by AAS, e.g.: "A friend was going to the gym with me and if you saw how his muscles grew... he gained over five kilos in a year and I hardly gained any weight at all – I wanted to catch up with him".

Gaining respect

Three respondents stated that AAS use was linked to their profession. They worked as security guards or policemen, muscular physique being necessary for their jobs. E.g.: "I needed to gain some muscle mass so when there is a brawl at the bar I can jump in and sort it out" or "I needed to increase my muscles because when we are on the beat, on a call and we are facing some bastards, I stand straight, take a deep breath, and they are impressed and don't make any trouble".

Curiosity and excitement

In two cases, the answers mentioned mere curiosity and interest in changes as the motivation for AAS use. "I'd been doing exercise for a couple of years and it was going kind of OK but it didn't feel quite right. And many guys around me were using, so I finally decided to give it a go too, why not, when it doesn't really hurt?" and "Everyone around me was talking about it, saying that protein alone wouldn't do and a few tablets would do the trick, so I though, why not give it a try". One athlete admitted experiencing the first AAS use as a specific type of excitement, linked to the need to distinguish himself from his environment: "I tried it once and then continued, it was exciting – I felt different, firm, big, I wanted to be different from the others in this way".

External factors

In the vast majority of respondents, motivations under external influence were crucial for the first use. This pertained mostly to the gym environment, in which AAS are a frequently discussed topic, e.g.: "When you go to the gym often, you talk about anabolics to other athletes". At the same time, respondents described some fellow gym visitors who had large muscles and were known to use AAS. These – usually competitive – bodybuilders did not conceal their AAS use, e.g.: "When I chatted to this bodybuilder, he told me it wouldn't grow without anabolic steroids", or "I made friends with one of the ripped guys and he recommended anabolics to me, he said there was nothing to it".

In two cases, the athletes were even offered these substances by a person from the gym. "This bodybuilder approached me and told me if I wanted to build muscles, I needed to start taking this" and "When I was complaining at the bar that my muscles weren't growing much, the gym owner showed me a list of substances that he could get for me at a decent price". Five younger athletes stated that their exercising as well as the subsequent AAS use were motivated by role models, who are generally outstanding athletes or some bodybuilders, but also public figures known from films, television or the internet, e.g.: "I saw that bodybuilder's chest and back..." or "Those athletes I see on television, that's what I'd like to look like", "Since I was younger I have watched these action films, like if I looked like the Captain America in Avengers" and "It's not just athletes have great bodies, I'd love to be like this rapper JARULE or 50 CENT".

Motivation for subsequent AAS use

Subsequent AAS use was motivated by the following factors.

Positive changes to body structure

All the respondents have observed changes to their bodies which they perceived as significantly positive. Thus, their presumption was met – their bodies developed more muscle matter, sometimes while also decreasing in fat and improving physical strength, e.g.: "I felt like my muscles were going to burst", "I was bulging all over the place, didn't expect it to be so efficient", or "There I was lifting weights I hadn't been able to lift for over two years".

Increase in self-esteem

Eight respondents stated increased self-esteem as an important motivation for further AAS use. E.g.: "I went out of the gym feeling so strong I could easily turn a car upside down... it was amazing", "I was thoroughly pumped up, I knew I could manage anything", "I wasn't afraid to go anywhere, I could stand up to

anyone trying to play some dirty tricks on me," "At work I did better in the physical tests, it was great", "My body felt incredibly firm, I was feeling amazing... watching my hair and skin, there were no changes".

Increased attention

Seven respondents described AAS increasing the interest of other people in themselves, as in: "At work, people were asking me when I started going to the gym and they said it was great", "My girlfriend liked it, she said I was finally a real man", or "At volleyball I took off my T-shirt, everyone was looking and asking which gym I was going to". In five cases, the respondents felt increasingly sexually attractive as well, e.g. "My wife started to like my belly and we had sex more often", "When I go to the swimming pool all the girls look my way... I can have whichever of them I want" and "I sit down at the bar wearing a tight T-shirt and I know I'm the centre of attention of all women".

Decrease in muscle mass, deterioration of strength, loss of the feeling of "firmness"

Four respondents stated that their reason for continued AAS use was muscle mass loss, deterioration of strength of losing the feeling of a firm body. This occurred after several days to weeks after withdrawal from the first AAS cycle. The individuals observed that the effect of AAS had been only temporary and found continued use necessary to reach further improvements. E.g. "I felt I'd grown awfully soft, as if I had mud in place of muscles", "The weights I started lifting quickly dropped again", or "I gained 5 kilos but in a month it was all gone, so I added up again".

External factors

Again, most of the respondents have confirmed the importance of other external factors which supported their further AAS use. In the vast majority of cases, these were positive reactions of friends, colleagues, classmates, and/or girlfriends, which assured them that their decision to use AAS had been right. E.g. "I could hear them whispering between themselves how I had grown", "Girls at school were talking about my muscles", "My girlfriend said it was superb and she joined me at the gym", "The lads in the gym said I have grown nicely and I could lift impressive weights" or "My boss told me there would finally be order in the bar, no funny tricks from the guests, because I had grown so much."

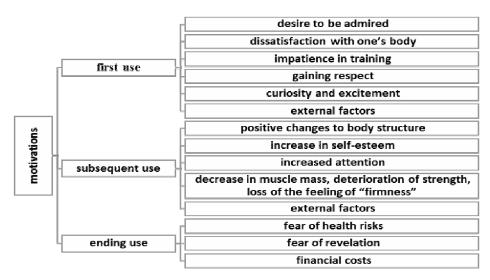


Fig. 1 Motivations for first use, further use, and presumed motivation which may result in discontinuing AAS

Presumed motivations/reasons for potential withdrawal from AAS Fear of health risks

Almost all respondents had a fairly good understanding of the health risks of AAS. However, the majority stated that the potential health reasons which might cause them to discontinue AAS use would have to be serious. They are convinced that if they use AAS in cycles and in precisely delimited doses, this cannot have a major impact on their health. Among the serious risks they rather mentioned changes in physical appearance, mainly hair loss, extensive acne or gynecomastia. For instance: "I inject them, so I am not worried about my liver. But if my hair started falling out a lot, I would quit", "I've already had to reduce my dose because I had acne everywhere. Now it's good, but if it worsens I will continue without them", "When I started using, I kept watching myself, but if I were to quit now, it would have to be very serious, some heart issue or bad liver", "I used to take some Lithuanian stuff and developed a small gynecomastia – I quit straight away. Now I'm using better steroids, but it if happened again, I would quit". One respondent stated that he would withdraw from AAS if he suffered from infertility. "I know that they damage the testicles. I don't want kids now, but when we decide to have kids, naturally I'll quit".

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Almost half of the respondents gave among their reasons the fear of their AAS use being revealed. Two individuals were concealing their use from their girlfriends, e.g. "My girlfriend thinks I am clean; if she found out, I think she would leave me". Two respondents were worried that the revelation of their AAS use may jeopardise their position at work. They were police officers, building a muscular body as a sort of professional marker. "If my boss found out I was using these substances, I guess I would be in trouble – we mustn't take any drugs, and these are drugs, actually" and "I might also have problems with using a gun, as steroids increase aggression a lot". One young athlete was afraid of his mother: "In fact, I only take small doses in cycles, but if mum found out, I think she'd kill me".

Financial costs

Three respondents stated that obtaining AAS is relatively financially demanding. They confirmed that they have considered withdrawal for this reason. "I have considered quitting twice, it costs an awful lot of money", "When I take German steroids, it costs a hell of a lot of money, and it's costing more and more, I might even quit. I don't dare to take any of that shit they import from Russia".

Discussion

In our sample, we have found that serious factors influencing AAS intake include external influences of the environment in which the athletes are currently living, doing sports, but for some of them also the environment in which they were brought up. Some information gained from the television, films and the internet form certain attitudes and views of body image. This gives rise to the notion that quality of one's successful life is connected to a certain body type, i.e. athletic, muscular and attractive. However, if the individual lacks certain innate favourable prerequisites, and their environment assures them that their body is imperfect (i.e. short, weak, uninteresting), they endeavour to eliminate this shortcoming. This effort is usually based in body care, conducted through gym attendance, trying to form one's body through physical exercise. Very often, the gym environment introduces athletes to the possibility of employing AAS to reach their goal. Naturally, the individual's knowledge of the topic is crucial here. Unfortunately, the information which these non-competitive athletes are given or seek actively tend to be one-sided, only describing the required benefits of these substances – i.e. the possibility of using their effects on forming and improving the user's body. Moreover, AAS are currently relatively easy to obtain, especially in gyms and on the internet.

The revealed motivations for the first AAS use correspond to the situation described above. Our respondents aim to emulate some of their role models, they are dissatisfied with their bodies, they wish to gain respect, admiration and sexual attraction. Also, some of them have been exercising long-term without reaching any considerable improvement. They acquire information about the "benefits" of these substances in the gym, or from their fellow gym visitors. The motivations revealed by the present study are partly similar to the motivations for the use of other, more commonplace legal as well as illegal drugs (e.g. Becoña et al., 2012; Creemers et al., 2015). Mostly, they tend to be unrelated to the individual's emotional instability (which is often mentioned as a factor), however, there are also some shared features. Our respondents also mention a low degree of self-esteem, which is related to their perception of their "inadequate" bodies. Another possible motivation is curiosity, connected to feelings of excitement during the first AAS use.

Motivations leading to the first and subsequent AAS use in our sample correspond to the results of other studies dealing with this topic (e.g. Kimergård, 2015; Petersson, Bengtsson, Voltaire-Carlsson, & Thiblin, 2010; Van Hout & Kean, 2016; Watt & Ricciardelli, 2012). Nearly always, the gym environment plays an important role. Often, it allows athletes to obtain information about the effects of AAS as well as making AAS easily available. However, in some areas, our results differ from other studies. Our respondents' frequent motivation was linked to the need for being sexually attractive. While other author list motivations related to low selfesteem or body dissatisfaction, only our respondents mention this particular need, allowing them to be successful with women. In our case, the reason is likely the young age of our respondents. Another possible reason is the length of AAS use. In our sample, the average length was 2.5 years, while e.g. Greenway and Price (2018) the average length was 19 years. Another difference are the motivations, as described by other authors, related to an effort to slow down the ageing process and retaining a young appearance (e.g. Santos & Coomber, 2017). This attitude was not identified in our sample. Again, we believe this is due to our respondents being younger. There was one more difference in our results. Some of our respondents link AAS use to their profession. In our environment, many gym visitors work in security agencies or parts of the police and the army. They need to be in excellent physical shape and an athletic build is an important part of their job. Likely, some individuals use AAS to attain these qualities. We need to point out one of the health risks of AAS use, namely the increase in aggression. If an AAS user carries arms or drives motor vehicles, he becomes dangerous.

In evaluating the possible reasons for withdrawal, health risks were mentioned the most frequently. Unfortunately, these athletes are often unaware of the serious health risks. If they use the drugs orally, they know that they can damage liver functions. But in case of parenteral intake of smaller doses in cycles, they are only worried about possible cosmetic changes, mainly hair loss and acne. Remarkably, a number of them conceals AAS use from their partners, parents or colleagues, and should they limit their AAS use, the main reason for this would be the financial costs of the substances. Here, a significant risk factor arises. Often, gyms host a relatively busy trade of these "doping" substances. There are individuals as well as whole groups involved in this trading,

making these drugs more readily available to the gym visitors. At the same time, however, other products occur which contain substances of unknown origin, or which are intended for the treatment of animals, their effect on the human organism often being unknown and likely highly risky. The situation in the Czech Republic was evaluated as early as 20 years ago by Pyšný et al. (1999) in a unique study. Although this study mapped AAS use in adolescents, our current findings are similar. The main motivations are still the effort to become admired, respected, and to deal with some shortcomings of one's body, encouraged by external influences (mainly those of gyms). We find it surprising that no major changes have occurred in this environment which would decrease AAS use.

Conclusions

We may conclude that sport activities may be linked to the use of certain drugs. In professional sports, the aim of drug abuse is reaching victory, which is connected to immense financial as well as social benefits. The situation is different in case of a non-competitive athlete; however, a number of these individuals also use doping substances, AAS above all. The environment of gyms is linked with individual motivations aiming to form a muscular build. The first use of AAS is typically motivated by a desire to gain admiration, by dissatisfaction with one's body, impatience in training, a desire to be respected, but also by curiosity and excitement. Further use is mainly influenced by the observed positive changes in body structure, increasing self-confidence and being the centre of attention. Other important motivations include a temporary decrease in muscle mass, in physical strength and a subjective feeling of a decreasing "firmness of the body". The reasons listed by our respondents potentially causing them to discontinue AAS use include the fear of health risks, of the AAS use being revealed, and the high financial cost. This issue definitely deserves further examination. Based on our data, however, it needs to be stated (in accordance with other authors) that new, efficient intervention methods need to be introduced. These should be specifically focused on the environment of gyms and the community of noncompetitive athletes, aiming to decrease AAS use.

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