

## 87 - ANALYSIS OF SOCIO DEMOGRAPHIC PROFILE AND DESIRE OF BODY MODIFICATION IN USERS OF ANABOLIC

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### INTRODUCTION

The use of anabolic steroids in athletes and young people, especially bodybuilders, has increased over the years, and one of the reasons contributing to this increase is the recovery of a body ideal that the male is represented by defined muscles and / or hypertrophied.

According Iriart and Andrade (2002), the steroid users often allude to the admiration of strong and muscular bodies, taken in this way, as a model of ideal body, and serving as a stimulus to the beginning of bodybuilding. Peyró (2008) also highlights the concern that male aesthetic longer an aspect linked to attitudes effeminate or homosexual and it became a matter socially accepted and integrated. As a consequence, the spread of male models of beauty, through advertising and the media, seems to provoke in some men, a distortion of their somatic perception, thus contributing to the development of pathological character or anabolic steroids. However, Iriart and Andrade (2002) found in a study conducted with users of anabolic steroids, the lack of information from respondents about the extent of damage to health due to the consumption of those, suggesting, for many, the desire to develop muscle mass and achieve the ideal body pervades the risk of side effects.

Alves, Pinto, Alves, Mota and Leirós (2009), making a survey of the sociocultural factors that influence satisfaction with the physical image, found that in Western culture, and all over the world, women yearn to achieve a thin ideal, while men aim muscular bodies and well defined. In a culture that values the ideal body, it is understandable that seek to reach this ideal of beauty. When this does not happen, they enter into a state of body dissatisfaction, which is a subjective assessment of negative physical appearance, which in turn leads to the psychological repercussions. In the case of males, in particular, have an exaggerated concern for staying strong and although in many cases they already have a muscular body, continue to have a distorted view of your image, considering weak and skeletal (MOLINA, 2007).

Considering the above, this study aims to present the socio demographic and desire for body modification users of anabolic steroids, specifically aimed at: (a) identify the profile of users by gender, marital status, income and education, (b) evaluate the adherence to diets, (c) assess the prevalence of supplements and medications, (d) determine the prevalence of body satisfaction, and (e) evaluate the percentage of desire for body modification.

### METHOD

Sample: There were 39 users of anabolic steroids recruited from gyms to (n=12), or through electronic digital form (n=27). That is, a survey was conducted with 776 respondents, of which 39 reported use of anabolic steroids. Therefore, for this study, will be considered only those who answered yes to this inclusion criteria (n=39).

Instruments: These participants completed a socio demographic questionnaire containing items such as sex, marital status, education and income, as well as assessment of habits and desire for body modification (such as conducting diets, consumption of vitamin supplements, medications, conducting plastic surgery, etc.).

Data analysis: Following the subjects' responses were recorded in the form of database computer program SPSS, and analyzed according to procedures of univariate descriptive statistics, through the presentation of absolute and relative data (frequencies and percentages) and measures of central tendency (mean) and variability (standard deviation and minimum and maximum values).

Ethical aspects: Submitted to the Ethics Committee of the University Hospital Onofre Lopes (Natal / RN), received a favorable considering their suitability to Resolution 196/96. In this perspective, were informed and assured the participants anonymity and confidentiality of their responses, both verbally and through a term of informed consent and stressed that the research did not involve risks to participants.

### RESULTS

Initially, we calculated the prevalence of anabolic steroid users in physically active. Whereas 39 subjects, 776 participants responded affirmatively to questions about steroids, there was therefore a 5.0% prevalence of steroid intake and / or use of anabolic steroids.

Further, we assessed participants' age: the average age of use of anabolic occurs at 23.5 years (SD=8.8), range 16-53. Regarding other demographic, it was observed that the mass majority are male (94.9%) and has marital status single (82.1%).

As for the monthly family income, were observed between the proportional percentage ranges: 20.5% receive up to R\$ 500.00, 28.2% receive R\$ 500.00 to R\$ 2,500.00 and 23.1% received between R\$ 2,500.00 and R\$ 4,000.00. About the education of the respondents, it was found that the majority had completed high school (23.1%) or incomplete higher education (20.5%). The other answers are detailed in Table 1.

Table 1: Evaluation of the demographic profile of steroid users

Variables	Responses by participants	f	%
Gender	Male	37	94,9
	Female	2	5,1
Marital Status	Single	32	82,1
	Married	4	10,3
	Other (not specified)	3	7,7
Monthly family income	Up to R\$ 500,00	8	20,5
	R\$ 500,00 - R\$ 2.500,00	11	28,2
	R\$ 2.500,00 - R\$ 4.000,00	9	23,1
	R\$ 4.000,00 - R\$ 5.500,00	2	5,1
	R\$ 5.500,00 - R\$ 7.000,00	4	10,3
	More than R\$ 7.000,00	4	10,3
Schooling	Did not respond to questions	1	2,6
	Incomplete primary	1	2,6
	Incomplete secondary education	4	10,3
	High school graduate	9	23,1
	Incomplete higher education	8	20,5
	Graduate full	5	12,8
	Did not respond to questions	11	28,2

About habits and desire to body modification, noted that most diets do or usually do for weight change (82.1%), consuming dietary supplements and multivitamins (89.7%) or usually do and made use of medicines for change in body weight (79.5%).

Regarding the desire for body modification, it was observed that 10.3% had to undergo a surgical procedure to change the physical appearance; however, a higher percentage of participants (28.2%) expressed interest in doing some surgery plastic. These findings come in line issues desire to body modification and body satisfaction. That is, we found that most participants have the desire to change something in your body (74.4%) and the majority is not satisfied with his own body (66.7%). These responses are systematized in Table 2.

Table 2: Evaluation of habits and desire for body modification in steroid users

Variables	Responses by participants	
	f	%
Diets	Diets usually do	32 82,1
	Not usually do diets	7 17,9
Consumption of dietary supplements	Supplements are consumed	35 89,7
	Do not consume food supplements	4 10,3
Medicines	Use of medicine to alter weight	31 79,5
	Does not use medicines to alter weight	8 20,5
Plastic surgery	It has done plastic surgery	4 10,3
	Never have been done plastic surgery	35 89,7
Desire to do plastic surgery	It would do some plastic surgery	11 28,2
	Would not want to have plastic surgery	27 69,2
	Did not respond to questions	1 2,6
Desire to modify the body	It would change something within the body	29 74,4
	Would not modify the body	10 25,6
Body satisfaction	It is satisfied with own body	13 33,3
	Not satisfied with own body	26 66,7

## DISCUSSION

From the results, there is a similarity with these other studies. Initially, in relation to the percentage of participants, there was a prevalence of about 5 %, In the research Kartakoullis, Phellas, Pouloukas, Petrou and Loizou (2008), they observed a prevalence of 11.6 %.

Regarding gender, Iriart, Chaves and Orleans (2009) also observed a preponderance of males in the use of anabolic steroids. That is, while this research was a percentage of 5.1% of women, that the percentage was 14.0%. In line with these findings, Ribeiro (2001) suggests the lack of studies on the incidence and prevalence of illicit use of anabolic steroids, but suggests that the user or consumer preference in general is male, and is aged 18 to 34 years old. In this research, the average age of the participants (M=23.5 years) was in the range presented by the author.

Also in relation to gender issues, with the objective of quantifying the ideal physical type and also check the level of dissatisfaction with body image of a group of hikers, a study was conducted with a sample of 186 individuals. The study found that men preferred stronger bodies and bulky and low fat percentage. The women wanted a leaner and less bulky (DAMASCENO, LIMA, VIANNA, VIANNA, & NOVAES, 2005).

Regarding variables desire to body modification, points to cultural influence as factor for the present results. Iriart, Chaves and Orleans (2009) found that the preoccupation with aesthetics was the main motivation for early activities focused on body modification (such as weight training, for example). This is the shame of one's body leads individuals often resort to the "magic formulas" such as steroids. One of the principal causes of changes in body image perception is the imposition, by the media, society and the sport, a pattern considered the ideal body, which associate success and happiness (PEYRÓ, 2008; PORTO & LINS, 2009).

Castro and Ferreira (2007) list possible consequence of dissatisfaction with body image, especially in males: (a) preoccupation with "no muscles" of the body itself - the subject is dedicated to thinking about it more than one hours daily, (b) dependence of exercise - insistence on practicing it daily presence of a withdrawal syndrome, with symptoms of irritability, anxiety and depression if it is unable to exercise, and keeps practicing physical exercises despite being contraindicated for social or medical reasons, (c) excessive attention to diet - geared for muscle development. The third assumption was observed in these results, since the adherence was observed in 82.1% of diets respondents.

Resuming the aspects related to body dissatisfaction, cited by Castro and Ferreira (2007), we have: (d) acceptance of suffering and physical harm as a way to achieve muscle development, (e) low self-esteem - the dependence derives an obsessive-compulsive disorder that makes the individual feel a failure, (f) continuous control weight - including checking the even several times a day, (g) measuring the thickness of the muscles - sometimes every morning to watch lost muscle mass overnight; (h) introverted personality and immature; (i) use of other substances to accelerate the process - these are substances in the body itself, such as creatine or carnitine to promote the increased volume muscle and / or energy use, or anabolic steroids, also used to increase muscle mass and fat loss.

In this perspective, McCreary, Hildebrant, Heinberg, Boroughs, and Thompson (2007) argue that the use of anabolic steroids is not done in isolation, and usually accompanied by the consumption of dietary supplements. This premise was observed in this study, whereas 89.7% used dietary supplements.

## CONCLUSIONS

From the results, it is clarified that was not the objective of this research to establish a deterministic relation between body dissatisfaction and steroid use in either the first point as the cause for the use of anabolic steroids. However, they are closely related themes to be on separately.

It is pertinent to note the limitations of this research. That is, all the presentation and discussion of the results were geared towards the cultural aspects primarily Western, not being contemplated physiological and psychological, as a consequence biological or life histories of respondents, for example, or aspects of other cultures. It is highlighted as a limitation, too, the low effective sample size, but underreporting the use of anabolic steroids and makes it difficult to restrict the amount of data collected.

Accordingly, it is suggested to conduct research contemplating these ellipses. Still, we agree with Iriart and Andrade (2002), to recommend the need to develop culturally appropriate actions, aimed at preventing steroid abuse among the population at risk, primarily. Finally, it is expected to have contributed to a theme with few epidemiological evidence and empirical research, especially given the seriousness of the implications for steroid users.

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**ANALYSIS OF SOCIO DEMOGRAPHIC PROFILE AND DESIRE OF BODY MODIFICATION IN USERS OF ANABOLIC**

**ABSTRACT**

The use of anabolic steroids in athletes and young people has increased over the years, however, there are still few empirical and epidemiological data related to the theme and this population. For this reason, research has been taken, with the aim of presenting the socio demographic and desire for body modification in users of anabolic steroids. Therefore, the participants answered a questionnaire specifically designed for the research and the answers were presented according to their prevalence. It was found a prevalence of 5.0% of consumption of steroids and / or use of anabolic steroids, primarily in males, with a mean age of approximately 23 years (SD = 8.8). It was also observed that most users practice diets, dietary supplements and consume medicines for alteration of body weight. Regarding the desire for body modification, it was found that most want to change something in the body and is not satisfied with it. The results were discussed with relevant literature, specifically related to cultural aspects and their influence to the ideal body image.

**KEYWORDS:** Anabolic, profile, body modification.

**CARACTERISTIQUES SOCIODEMOGRAPHIQUES D'ANALYSE ET DE MODIFICATION CORPORELLE DU DESIR DANS UTILISATEURS DES STEROÏDES ANABOLISANTS**

**RÉSUMÉ**

L'utilisation de stéroïdes anabolisants chez les athlètes et les jeunes a augmenté au fil des ans, cependant, il ya encore peu de données empiriques et épidémiologiques liés au thème et cette population. Pour cette raison, la recherche a été effectuée dans le but de présenter la situation démographique et socio désir pour les utilisateurs de modification du corps de stéroïdes anabolisants. Par conséquent, les participants ont répondu à un questionnaire spécialement conçu pour la recherche et les réponses ont été données en fonction de leur prévalence. Nous avons trouvé une prévalence de 5,0% de la consommation de stéroïdes et / ou de l'utilisation de stéroïdes anabolisants, principalement chez les hommes avec un âge moyen d'environ 23 ans (écart type=8,8). On a également observé que la plupart des utilisateurs régimes pratiques, des compléments alimentaires et de consommer des médicaments utilise pour la modification du poids corporel. En ce qui concerne le désir de modification corporelle, il a été constaté que la plupart veulent changer quelque chose dans le corps et qui n'est pas satisfait. Les résultats ont été discutés avec la documentation pertinente, en particulier en ce qui concerne les aspects culturels et leur influence sur l'image corporelle idéale.

**MOTS-CLÉS:** profil, modification du corps, anabolisants.

**ANÁLISIS DE PERFIL SOCIO DEMOGRÁFICO Y DESEO DE MODIFICACIÓN DEL CUERPO EN USUARIOS DE ANABOLIC**

**RESUMEN**

El uso de esteroides anabólicos en atletas y jóvenes ha aumentado en los últimos años, todavía hay pocos datos empíricos y epidemiológicos relacionados con el tema y esta población. Por esta razón, la investigación se llevó a cabo, con el objetivo de presentar el socio demográfico y el deseo de los usuarios de modificación del cuerpo en usuarios de esteroides anabólicos. Por lo tanto, los participantes respondieron a un cuestionario diseñado específicamente para la investigación y las respuestas se dieron en función de su prevalencia. Se encontró una prevalencia de 5,0 % de la ingesta de esteroides y / o el uso de esteroides anabólicos, sobre todo en los varones, con una edad media de unos 23 años (SD=8.8). También se observó que la mayoría de los usuarios hacen dietas, suplementos dietéticos y consumen medicamentos para la alteración del peso corporal. En cuanto al deseo de modificación del cuerpo, se encontró que la mayoría quiere cambiar algo en el cuerpo y no está satisfecho con ella. Los resultados fueron discutidos con la literatura relevante, especialmente en lo que respecta a los aspectos culturales y su influencia a la imagen corporal ideal.

**PALABRAS CLAVE:** anabólicos, perfil, modificación del cuerpo.

**ANÁLISE DO PERFIL SÓCIODEMOGRÁFICO E DESEJO DE MODIFICAÇÃO CORPORAL EM USUÁRIOS DE ANABOLIZANTES**  
**RESUMO**

O consumo de esteróides anabolizantes em atletas e jovens tem aumentado ao longo dos anos, porém, ainda são escassos os dados empíricos e epidemiológicos relacionados ao tema e a esta população. Por este motivo, realizou-se pesquisa, com o escopo de apresentar o perfil sócio demográfico e o desejo de modificação corporal de usuários de esteróides anabolizantes. Para tanto, os participantes responderam a um questionário elaborado especificamente para a pesquisa, cujas respostas foram apresentadas segundo as suas prevalências. Observou-se uma prevalência de 5,0% de ingestão de esteróides e/ou uso de anabolizantes, prioritariamente no sexo masculino, com idade média de aproximadamente 23 anos (DP=8,8). Também foi observado que a maioria dos usuários pratica dietas, consome suplementos alimentares e utiliza medicamentos para alteração do peso corporal. Em relação ao desejo de modificação corporal, foi constatado que a maior parte deseja modificar alguma coisa no próprio corpo e que não é satisfeito com ele. Os resultados foram discutidos segundo literatura pertinente, especificamente no que concerne aos aspectos culturais e sua influência para os ideais de imagem corporal.

**PALAVRAS CHAVE:** Anabolizantes, perfil, modificação corporal.