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PERCEPTION AND ATTITUDE TOWARDS ANDROGENIC-ANABOLIC STEROIDS USE AMONG GENERAL POPULATION OF KARACHI

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ABSTRACT

Anabolic steroids are man-made substance relate to the male sex hormone testosterone. The most ideal term for these substances is anabolic-androgenic steroids. "Anabolic" say to muscle building, and "androgenic" say to extended male sex traits. Anabolic steroids were made in the late 1930s basically to treat hypogonadism, a few sorts of impotence, delayed puberty, and shrinking of the body brought about by HIV contamination or different ailments. Amid the 1930s, analysts found that anabolic steroids could energize the advancement of skeletal muscle which provoked mishandle of the compounds first by weightlifters and bodybuilders and afterward by athletes in different games. The objective of the study was to assess people's perception about anabolic steroids. The survey-based study was conducted in general public and the sample size of survey was 100. The survey was conducted by the help of questionnaire that consisted of questions. The results showed that public is not aware about anabolic steroids. Anabolic steroid abuse is growing very fastly in our society. People use weight gainer products but they don't know that these kind of products contain anabolic steroids and they are not aware of their hazards.

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INTRODUCTION

Anabolic steroids also called as anabolic-androgenic steroids (AAS) (1). Anabolic steroids are androgen steroids and synthetic derivative of the male sex hormone (Testosterone). It is structurally and pharmacologically resembles to testosterone (1, 2). Testosterone is anabolic and increment of protein inside cells, particularly in muscles of skeleton. Anabolic-androgenic steroids likewise have androgenic as well as virilizing impacts, including enlistment of the improvement as well as support of secondary sexual qualities of masculine, for example, the development of the body hair and vocal strings. Anabolic-androgenic steroids were integrated in the 1930s, and are presently utilized medicinally as a part of drug to fortify muscle development and craving, instigate male adolescence as well as treat chronic wasting conditions, for example, AIDS and cancer (3-5). For a considerable length of time, anabolic steroids were considered the backbone of treatment for hypoplastic anemias because of blood cancer or kidney disease, particularly aplastic iron deficiency (6). Anabolic steroids can be utilized by endocrinologists of paeds to treat growth failure in children (7). It is also used in men with low amount of testosterone as hormone replacement; also viable in enhancing libido for elderly males (8, 9). Dysphoria of gender, by creating attributes of secondary male, for example, more profound voice, expanded bone as well as bulk facial hair, expanded amounts of red platelets, and extension of clitoral in trans man patients amid females or the individuals who create female optional qualities of sex yet craving to instead perused as male or examine more equivocal, for example, dysphoric non-transgender intersex men and various non-

paired transgender people both dyadic intersex and intersex (10, 11). Androgens are given to numerous young men upset about extraordinary deferral of adolescence. Testosterone is currently almost the main androgen utilized therefore and has been appeared to expand stature, weight, as well as without fat mass in young men having deferred adolescence (12). Anabolic steroids have been utilized by men and ladies as a part of a wide range of sorts of expert games to accomplish a focused edge or to help with recuperation from damage. These games incorporate shot put, weightlifting, working out and other Olympic style sports, boxing, baseball, blended hand to hand fighting, wrestling, cycling, cricket and football. Such utilize is precluded by the tenets of the administering groups of generally games. Anabolic steroid utilize happens amid teenagers, particularly by those taking an interest in aggressive games (13). The long term use or excessive dose of AAS produces health risks (14, 15). They adverse effect include acne, changes in cholesterol level, liver damage, high blood pressure, impaired liver function, increased libido in men and women, Hirsutism in women, Suppression of gonadal steroidogenesis, Masculinization of female fetus, Lengthened in women and Cardiac damage (16-22). The impact of anabolic steroids on mass is brought about in no less than 2 ways (23): Firstly, increment protein's creation; secondly, diminish recuperation time through hindering the impacts of stress hormone that is cortisol on tissue of muscle, so that muscle's catabolism is enormously decreased. It has been estimated that lessening in breakdown of muscle may happen by anabolic steroids repressing the activity of glucocorticoids (other steroid hormones) that advance the muscles breakdown (13). Anabolic steroids likewise influence the cells quantity that form into cells of fat-stockpiling, through favoring cell separation into cells of muscle instead (24).

METHODOLOGY

Study Design:

A survey questionnaire was developed to address the study questions and was disseminated among the general population. The respondents were asked to answer close-ended questions.

Participants:

Collected data is comprised of 100 respondents. Demographic details and questions regarding anabolic steroids were asked to the respondent.

Data Analysis:

The data which was collected through retrospective study was coded, entered and analyzed by using Excel with a specific end goal to assess people's perception about anabolic steroids.

RESULTS

Socio-demographic characteristics of respondents

The study includes total number of 100 individuals including male and female (male=55, female=45) of all age groups 15-25 years (35%), 26-35 years (40%), 36-45 years (18%), 45-55 years (5%), above 55 years (2%). (Table 1.)

People's Perception about Anabolic Steroids

The result obtained from the analysis of data has estimated that (30%) individual familiar of the term anabolic steroids while (70%) do not know about anabolic steroids, (12%) know that it is available in weight gainer supplements while (88%) thought it is not available in weight gainer supplements, (15%) said anabolic steroids are not harmful for females while (75%) said anabolic steroids are harmful for females, (2%) individual think anabolic steroids can affect behavior while (98%) it cannot. (40%) said steroids are more dangerous for teens than for adults while (60%) said they are not. (6%) think that steroids do cause permanent

damage although (94%) they do not. (11%) individuals think that anabolic steroids can cause infertility in men and women while (89%) think they cannot. (15%) respondents said that effective treatments are available for steroid abuse while (75%) answered no. (Table 2.)

DISCUSSION

The study showed that people have poor perception about anabolic steroids. They are not aware about their hazards. Anabolic steroids are man-made substance of the male sex hormone, testosterone. Physicians can endorse steroids to treat distinctive helpful conditions. Anabolic steroids are available in weight gainer supplements. A few competitors and weight lifters misuse these medicines to bolster execution or upgrade their physical appearance. They not simply have an anabolic (muscle and quality building) affect, however are androgenic (impacting sexual traits) as well. To put it insensitively, steroids are used to make men, brave. For this single cause steroids are a great deal more possibly hazardous to females than males. Right when familiar with the female endocrine system, AAS make an honest to goodness bump. The most widely recognized symptom of women anabolic steroids in females is virilization. This alludes to the improvement of male attributes among females because of intemperate arrival of testosterone. Anabolic steroids can influence conduct in way that proceeded abuse with steroid can catch up on a bit of a similar pathways of cerebrum as well as chemicals—including serotonin, dopamine, and structures of opioid—that are affected by various pharmaceuticals. Abuse of anabolic steroids may prompt transient impacts, for example, mental issues. Outrageous emotional episodes can likewise happen, including "roid seethe"—irate sentiments and conduct that may prompt viciousness. Anabolic steroid manhandle may incite genuine long haul, notwithstanding enduring, health issues. Social brokenness, wretchedness, uneasiness, and aggression brought about by the unlawful utilization of AAS are similarly as hurtful as the possible physiological harms. Undoubtedly, while the physiological harm can be restored taking after cessation of steroid utilize, behavioral harm takes any longer to recuperate. Anabolic steroids are more unsafe for high schoolers than grown-ups in light of the fact that they can stop development. Anabolic steroids can bring about changeless harm which may incorporate decrease liver's excretory function, CVS harm. Anabolic steroids diminish fertility in male a similar way that testosterone does: by meddling with the signals of hormone that are expected to deliver sperm. Exactly how much harm is done relies on upon the drugs(s), dose(s), and to what extent the man takes them. Most men will recoup sperm creation 3 to 12 months after they quit taking the medication. In light of the solid negative effect of anabolic steroids on fertility of male and the other wellbeing concerns identified with these substances, men ought not to utilize these medications. In the ordinary female body little measures of testosterone are delivered, and as in male, erroneously growing levels by administration of AS will impact the hypothalamic-pituitary-gonadal pivot. An extension in revolving around androgens will limit the creation and entry of LH and FSH, achieving a diminishing in serum levels of LH, FSH, estrogens and progesterone. This may realize obstacle of follicle game plan, ovulation, and variations from the norm of the menstrual cycle. The irregularities of the menstrual cycle are depicted by a prolongation of the follicular stage, shortening of the luteal stage or amenorrhea. Regardless of the way that these movements are all things considered more kept up in more youthful ladies,

significant between individual responsiveness to anabolic steroids exists. Treatment for anabolic steroid mishandle have watched behavioral treatment to be helpful. More research is relied upon to perceive the best treatment decisions. In particular occurrences of outrageous impulse, patients have taken answers for treat reactions of withdrawal. For example, social insurance supplier have prescribed antidepressants to treat discouragement and agony drugs for cerebral pains and muscle and joint torment. Diverse medications have been used to restore the patient's system of hormone.

CONCLUSION

In last, it is concluded that people has poor perception about anabolic steroids. People are using weight gainer supplement without knowing the fact that they contain anabolic steroids. They have little knowledge about the adverse effects of anabolic steroids. It enormously influences one's body. In any case, you can't state that two people will have accurately the same while using the prescription. Anabolic steroids help the body put on muscle and incorporate quality in the short term. Over the long haul, steroids can have different negative outcomes for the body and can notwithstanding achieve demise. When you take steroids you are playing with flame and will get scorched. In case you have to get alive and well and improve your looks and quality, the best way is to have a fitting eating standard and adequate preparing time. This has been exhibited over and over that it is the most secure and most profitable technique for getting sound.

DECLARATION OF INTEREST:

Authors declare no conflict of interest.

FIGURES CAPTIONS:

1. Figure-1: Age v/s No. of Respondents
2. Figure-2: Gender v/s No. of Respondents
3. Figure-3: Questions v/s No. of Response

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Table-1: Socio-demographic characteristics of respondents

S. No	Age	No. of respondents
	15-25 years	35%
	26-35 years	40%
	36-45 years	18%
	46-55 years	5%
	> 55 years	2%
	Gender	**No. of respondents**
	Male	55%
	Female	45%

Table-2: People's Perception about Anabolic Steroids

Questions	No. of response	
	Yes	No
Familiar of term anabolic steroids?	30%	70%
Do you know it is available in weight gainer supplements?	12%	88%
Is it ok for females to take anabolic steroids?	15%	75%
Can anabolic steroids affect behavior?	2%	98%
Are anabolic steroids any more dangerous for teens than for adults?	40%	60%
Do anabolic steroids cause permanent damage?	6%	94%
Do anabolic steroids cause infertility in men and women?	11%	89%
Are there effective treatments for anabolic steroid abuse?	15%	75%

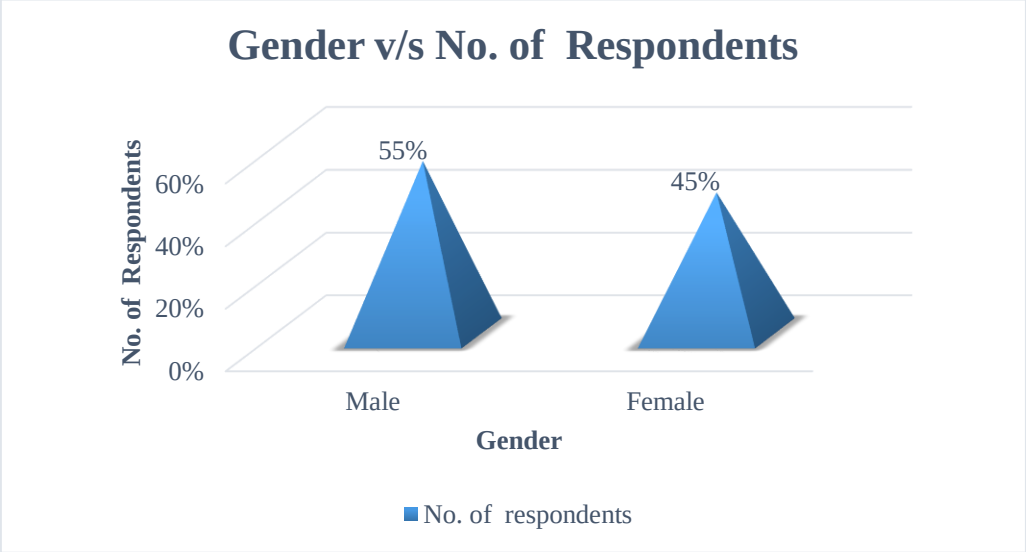

Figure-1: Age v/s No. of Respondents

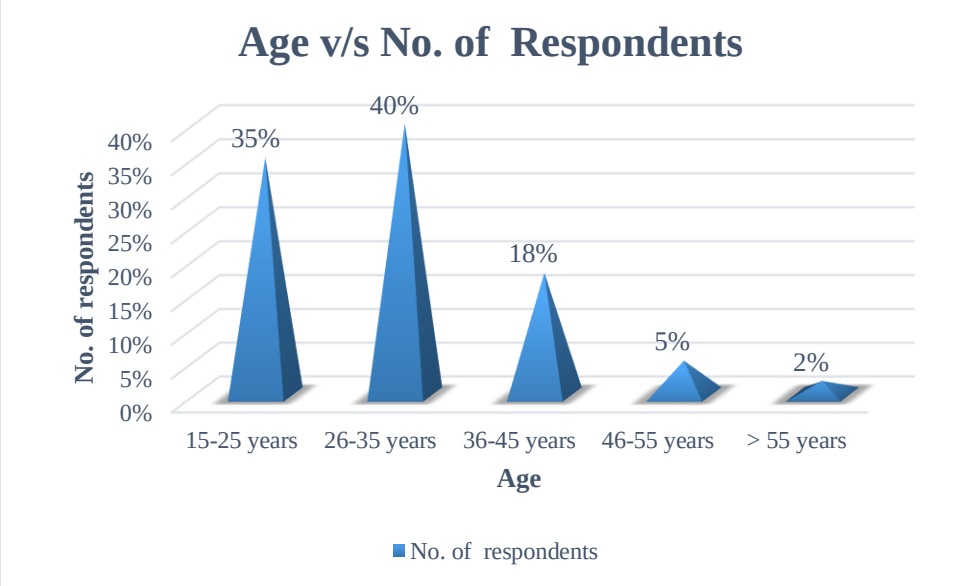

Figure-2: Gender v/s No. of Respondents

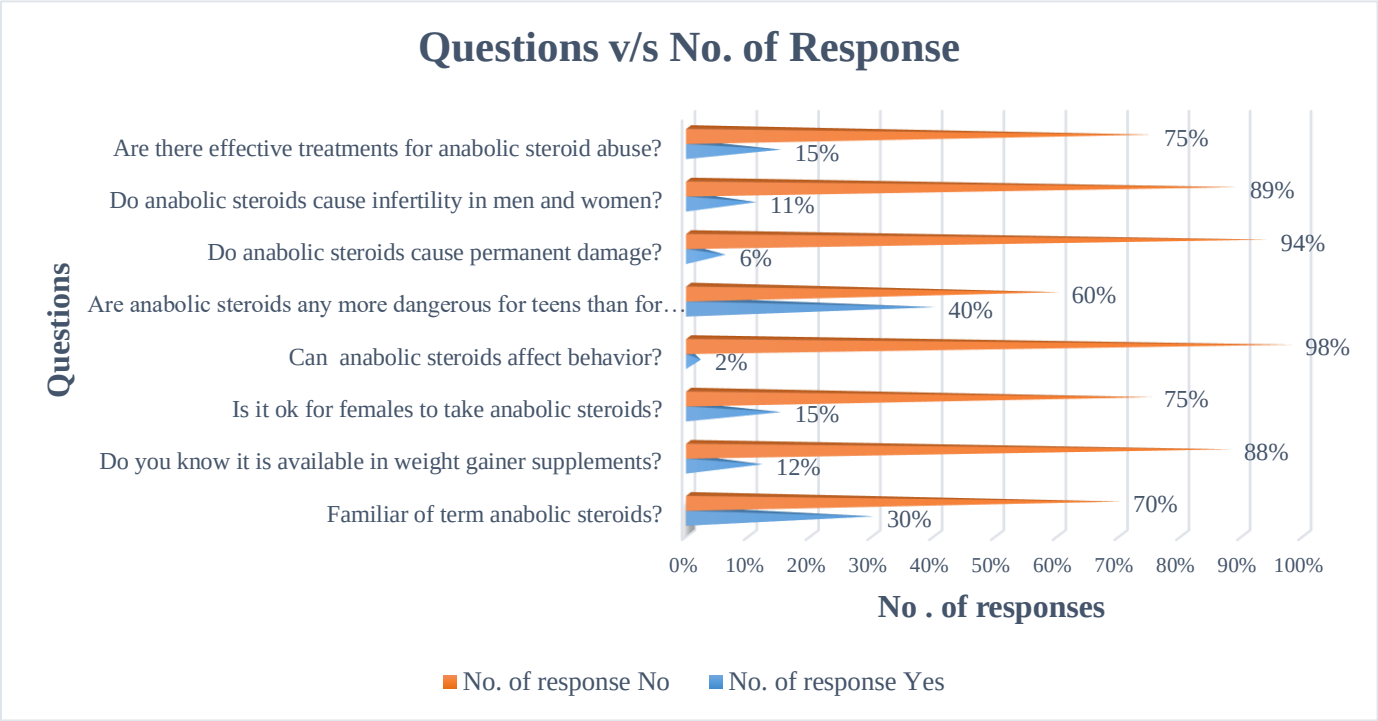

Figure-2: Gender v/s No. of Respondents