ABSTRACT

**Aims:** The primary aim of the present research was to provide awareness about the latest trends of drug practices of national athletes of Pakistan for the improvement of their sport performance.

**Methodology:** The samples were national athletes belonging to various sports departments of national level. The athletes were selected using snowball and convenient sampling approaches.
The questionnaire employed for the data collection was self-administered. With the optimistic consent of the athletes, 80 questionnaires were dispatched at their home addresses. Therefore, 62 athletes (77.5%) returned the filled questionnaires. The requisite information of all filled questionnaires was coded in SPSS-26 software to get the desired results. Moreover, descriptive statistics through frequencies and percentages was executed to draw the findings and further discussions of the present study.

**Results:** The mean age of the national athletes was noted 34.17 years with 2.8 std. deviation and the age range was found between 30 to 38 years. The descriptive statistics of drug practices by national athletes calculated through occasionally, sometimes and frequently. Majority of the national athletes followed and practiced the trends of drug while participating in their national games and championships to enhance their sport performance to approach the winning position and get the medals.

**Conclusion:** It was concluded that athletes may not aware the side effects and hazards of these drug practices using anabolic steroids, charas, marijuana, aspirin, cocaine, and heroin. National associations and federations should conduct seminars and awareness workshops for the athletes prior to their participation in sport competitions so that national athletes may save themselves from the side effects and afterwards physical damages.

**Keywords:** Drugs practices; amplification; Pakistani athletes; sports performance.

### 1. INTRODUCTION

The International Amateur Athletic Federation (IAAF) in 1928 was taken the first standpoint against the use of drugs in sports [1]. There was limited research work found on the athletes’ frequency of ingestion of energy drinks [2]. In USA, many athletes use performance improving drugs on a formal base [3]. Testing for drug usage is infrequent but practiced repeatedly in elite sports by the athletes to get the desired sport outcomes [1].

Athletes were originated to be at a greater danger of illegal use of drugs misuse conditions [4]. The anti-inflammatory influence was précised to defending the cardiac system, it was established by decrease inspiring indications [5,6]. For the health of the athletes, steroids and drugs deliver approximately assistance to the manipulator improved performance but it is observed to be risky for the health of athletes [7].

Non-athletes students at comparable lower degrees misuse illegal drugs than mature athletes [8]. Several studies have established that athletes in high school reported more ingredient usage (alcohol, stimulants, and anabolic steroids) than their non-athletes [9]. Certainly, elite athletes, with the rate of participation in sports and quantity of leisure prohibited drugs, have together been originated to calculate steroid usage [10]. The athletes with a history of prohibited drug-use misjudged with the dominance of the use of drugs [11].

To increase the sport performance disregarding the health worries and breach testing, maximum testing processes are completely insufficient in holding manipulators in competitive sports [7]. In spite of framing the official international anti-doping values in 2004, WADA (World Anti-Doping Agency) has yearly restructured their codes and connected documents [11] and pondered the so-called perceptions of the incorrect agreement influence [12].

With the number of causes, it has been acknowledged that the athletes use a variety of drugs engaging in sports [13]. Numerous performance improving ingredients and processes provide a chance in sport improvement to athletes for several years [14]. Student-athletes mostly reproduce the drug usage practices from their nonathletic peers that may be interested to consume the ergogenic ingredients to develop their sport performance [13].

As the third century to develop athletic performance, the usage of doping has been stated as primary source defined by the IOC (International Olympic Committee). In competing athletes, any biological ingredient reserves the irregular amount into their body with the individual intent of growing in a partial way to improve their performance in competition [15].

As the outcome of the features and biological influences of drugs, they inoculate extensive support to athletes in their performance [14]. In modern years, there have been lots of mature
athletes involved in taking shameful performance improving ingredients [16]. The central consideration, why this type of approach is essential to drug usage in sports, is that the insolences develop a substitute for the unobserved behaviors [17].

Banned ingredients comprise of cocaine, amphetamines and heroine, steroids, stanozolol, nandrolone, and dianabol with comparable biological ingredients [14]. Pain reduction, recovery from injury, sensitive energy/arousal, reduction/minor arousal, and weight decrease were found dominant causes recognized by athletes [18]. Several athletes firmly use drugs during the competitions to improve their sport performance or decrease the muscular pain. On the other hand, numerous athletes in present days also use drugs throughout their trainings [14].

The causes highlighted by the athletes’ behand the usage of drugs comprised of a fear of failure and opposing less self-confidence [18,19]. Numerous athletes indicated that they feel great stress while using drugs to improve their sport performance [16]. Moreover, prohibited performance improving drugs originates with several side effects in athletes. The primary aim of the present research was to provide awareness about the latest trends of drug practices of national athletes of Pakistan for the improvement of their sport performance.

3. RESULTS AND DISCUSSION

The findings of the current study were strained to achieve the preferred objectives. The mean age of the national athletes was 34.17 years with 2.8 std. deviation and the age range was found between 30 to 38 years. The majority of the athletes have partaken three and four times in the national games or championships during their sports carriers. Athletes participated for competitions in their specific sport (cricket, 17; boxing, 09; wrestling, 10; and athletics, 26).

The descriptive statistics of drug practices by national athletes calculated through occasionally, sometimes and frequently as displayed in Table 1. Therefore, the results indicated that 53% of the athletes used frequently the anabolic androgenic steroids, whereas, 29% agreed to use them sometimes. During the competitions, 60% of national athletes experienced charas frequently for the purpose to enhance their sports performance. Anabolic steroids boost the muscular strength through the blood stream which be able to exert the force of muscles quickly [7]. The misuse of anabolic steroids possess the health consequences such as high blood pressure, blood clotting, heart attacks and strokes, and artery damages [10].

The findings showed that 48% of the athletes agreed to practice frequently the marijuana at the time of competing their sports, whereas, 36% claimed to use it sometimes. Therefore, 60% of national athletes experienced charas frequently for the purpose to enhance their sports performance. Anabolic steroids boost the muscular strength through the blood stream which be able to exert the force of muscles quickly [7]. The misuse of anabolic steroids possess the health consequences such as high blood pressure, blood clotting, heart attacks and strokes, and artery damages [10].

The findings showed that 48% of the athletes agreed to practice frequently the marijuana at the time of competing their sports, whereas, 36% claimed to use it sometimes. Therefore, 50% of national athletes frequently utilized aspirin to enlarge the competencies of their sports, whereas, 42% agreed to use aspirin sometimes as displayed in Table 1. The marijuana causes dizziness, confusion, and drowsiness [3]. It may be worsen in some mental illnesses such as depression and damaged the lungs as well [11,15].
Table 1. Drugs practiced by the athletes during competitions

| Construct                         | Category      | Frequency | %   |
|-----------------------------------|---------------|-----------|-----|
| Anabolic Androgenic Steroids      | Occasionally  | 11        | 17.7% |
|                                   | Sometimes     | 18        | 29.0% |
|                                   | Frequently    | 33        | 53.3% |
| Charas                            | Occasionally  | 08        | 12.9% |
|                                   | Sometimes     | 17        | 27.4% |
|                                   | Frequently    | 37        | 59.7% |
| Marijuana                         | Occasionally  | 10        | 16.1% |
|                                   | Sometimes     | 22        | 35.5% |
|                                   | Frequently    | 30        | 48.4% |
| Aspirin                           | Occasionally  | 05        | 8.1%  |
|                                   | Sometimes     | 26        | 41.9% |
|                                   | Frequently    | 31        | 50.0% |
| Cocaine                           | Occasionally  | 07        | 11.3% |
|                                   | Sometimes     | 23        | 37.1% |
|                                   | Frequently    | 32        | 51.6% |
| Heroin                            | Occasionally  | 05        | 8.1%  |
|                                   | Sometimes     | 17        | 27.4% |
|                                   | Frequently    | 40        | 64.5% |

The results revealed in Table 1 that 52% of national athletes practiced frequently the cocaine within the passage of their sports competitions, whereas, 37% mentioned it sometimes. Therefore, 65% of elite athletes experienced frequently the heroin to improve their sports capacities, whereas, 27% agreed to utilize it sometimes. The cocaine is considered a highly addictive drug that may effect on health and wellbeing [8]. However, heroin may cause warm coloring of skin, dry mouth, nausea, vomiting, and itching. After the initial effects, it slows the heart and breathing functions [19].

5. CONCLUSION

The primary aim of the present research was to provide awareness about the drug practices of national athletes for the improvement of their sports performance. Majority of the national athletes followed and practiced the trends of drugs in their national games and championships to enhance their sports performance to approach the winning position and get the medals. It was concluded that athletes may not aware the side effects and hazards of these drug practices like anabolic steroids, charas, marijuana, aspirin, cocaine, and heroin. National associations and federations should conduct seminars and awareness workshops for the athlete prior to their participation in sports competitions so that national athletes may save themselves from the side effects and afterwards physical damages.

CONSENT

As per international and national standards, respondents’ written consent has been sought prior to data collection and preserved by the authors.

ETHICAL APPROVAL

It is not applicable.

ACKNOWLEDGEMENTS

The authors would like to thank all the study participants for their participation and their kind cooperation throughout the study.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Harcourt PR, Unglik H, Cook JL. A strategy to reduce illicit drug use is effective in elite Australian football. British Journal of Sports Medicine. 2012;46:943-945.
2. Rosenbloom C. Energy drinks, caffeine, and athletes. Nutrition Today. 2014;49(2):49-54.
3. Thornton JR, Mc Elmurry B, Park C, Hughes T. Adolescent performance enhancing substance use: Regional differences across the US. Journal of Addictions Nursing. 2012;23(2):97-111.
4. Buckman JF, Farris SG, Yusko DA. A national study of substance use behaviors among NCAA male athletes who use banned performance enhancing substances. Drug Alcohol Depend. 2013;131(1-2):50-55.

5. Palmefors H, DuttaRoy S, Rundqvist B, Börjesson M. The effect of physical activity or exercise on key biomarkers in atherosclerosis: A systematic review. Atherosclerosis. 2014;235(1):150-161.

6. Ade DSS, Mota DMP. Effects of physical activity and training programs on plasma homocysteine levels: A systematic review. Amino Acids. 2014;46(8):1795-1804.

7. Latiner C. Steroids and drug enhancements in sports: The real problem and the real solution. DePaul Journal of Sports Law. 2006;3(2):192-219.

8. Yusko DA, Buckman J, White H, Pandina R. Alcohol, tobacco, illicit drugs, and performance enhancers: A comparison of use by college student athletes and nonathletic. Journal of American College Health. 2008;57:281-290.

9. Donohue B, Pitts M, Gavrilova Y, Ayarza A, Cintron KI. A culturally sensitive approach to treating substance abuse in athletes using evidence-supported methods. Journal of Clinical Sport Psychology. 2013;7:98-119.

10. Lorang M, Callahan B, Cummins KM, Achar S, Brown SA. Anabolic androgenic steroid use in teens: Prevalence, demographics, and perception of effects. Journal of Child & Adolescent Substance Abuse. 2011;20:358-369.

11. Morente-Sa´nchez J, Zabala M. Doping in sport: A review of elite athletes’ attitudes, beliefs, and knowledge. Sports Medicine. 2013;43:395-411.

12. Dunn M, Thomas JO, Swift W. Elite athletes’ estimates of the prevalence of illicit drug use: Evidence for the false consensus effect. Drug Alcohol Review. 2012;31(1):27–32.

13. Green GA, Uryasz FD, Petr TA, Bray CD. NCAA study of substance use and abuse habits of college student-athletes. Clinical Journal of Sport Medicine. 2001;11:51-56.

14. Afolayan J, Adegbayegbe M. Knowledge and use of performance enhancing drugs among Nigeria elite athletes. Journal of Applied Chemistry. 2012;1(5):31-38.

15. Ramachandra K, Narendranath S, Somashekar HS, Navin AP, Reshma SR, Veena A. Drug abuse in sports. Journal of Complementary and Alternative Medicine. 2016;3(3):1-5.

16. Judge LW, Bellar D, Petersen J, Gilreath E, Wanless E. Taking strides toward prevention-based deterrence: USATF coaches perceptions of PED use and drug testing. Journal of Coaching Education. 2010;3(3):56-71.

17. Judge LW, Bellar D, Craig B, Gilreath E. The attitudes of track and field throwers toward performance enhancing drug use and drug testing. Journal of Research. 2010;5(2):54-61.

18. Akindutire IO, Adegbayega JA, Olanipekun JA. Doping knowledge and practice among elite athletes in tertiary institutions in Nigeria. European Scientific Journal. 2012;8(4):152 – 163.

19. Moran A, Guerin S, MacIntyre T, Kirby K. The development and validation of the doping attitudes and behaviour scale. 2008;UJJ.