



KNOWLEDGE OF NARCOTICS AND THEIR CONSUMPTION AMONG TRACK AND FIELD ATHLETES OF MAHARASHTRA

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ABSTRACT

Several studies have reported use of performance enhancing drugs by sports persons worldwide. However, a little is known about the awareness, knowledge and utilization of the banned narcotic drugs among elite athletes in India especially in Maharashtra state. Therefore, the objective of this study was to assess the knowledge of narcotic drugs (i.e., performance enhancing drugs) and their utilization in elite athletes of Maharashtra state.

A descriptive cross-sectional survey design has been employed, where a standard questionnaire on "knowledge about narcotic drugs" was administered on a large number of track and field athletes (n=210), aged 18-26 years, who represented athletic competitions at state / national / inter-university levels.

The results indicate that more than 50% of the track and field athletes are unaware about ill effects of narcotic drugs on health, and consuming them for enhancement of athletic performance, whereas rest of the athletes had proper knowledge on narcotics but knowingly consuming these drugs.

Thus, majority of the athletes in Maharashtra are abusing drugs and it is alarming to control such addiction. Although the results are based on the respondents' honest responses to the questions asked for, still the responses may be susceptible to respondents' bias. Therefore, future studies should consider using biochemical and physiological testing about the usages of narcotics.

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INTRODUCTION

Track and field athletes are those who participate in running, throwing and jumping events in competitive sport. Most of the athletes' abuse narcotic drugs to enhance their physical performance to win the athletic championships. Narcotics are considered as substances and drugs which are able to change psychophysiological and physical performance status of an organism in a wide range from sleep and total immobilization up to euphoria and excitation. It has been reported that the driving force to use these drugs by athletes is a desire to achieve success, glory and wealth (Bloodworth *et al.*, 2012). In fact, abuse of narcotic drugs by athletes called doping. Although doping increases sports performance, it spoils the sports career and in the long run damages the health of the athletes (Knotts 2000; Yusuf, 2010). The use of doping drugs is increasing gradually may probably be due to the pressure placed on athletes in all forms viz., from family, fans, peers, coaches, and media. The pressure placed on athletes to win and set personal bests has resulted in enhanced drug use among different athletes.

Considering the ill effects of doping, the International Olympic Committee (IOC), and more recently, the World Anti-Doping Agency (WADA) have been leading the way to battle against drugs abuse in sport.

Review of literature revealed that doping agents or banned drugs are Buprenorphine, Dextromoramide, Diamorphine, Fentanyl and its derivatives, Methadone, Morphine, Oxycodone, Oxymorphone, Pentazocine, Pethidine etc., have been misused in approximately 1% of population of America and Sweden (Tokish *et al.*, 2004; Sjoqvist, Garle and Rane, 2008). Also, numerous studies have reported the use of performance enhancing drugs in young sportspeople mostly for body appearance and not necessarily in competing games (Kindlundh *et al.*, 1998; Kartakoullis *et al.*, 2008; Mallia *et al.*, 2013; Striegel *et al.*, 2006). Further it is estimated that around 5% of high school students of the United States had already used doping agents for enhancing their growth (Saugy *et al.*, 2006). Though several studies have reported use of performance enhancing drugs by sports persons worldwide, a little is known about the awareness, knowledge and utilization of the banned narcotic drugs among elite athletes in India especially in Maharashtra state. Therefore, the objective of this study was to assess the knowledge of narcotic drugs (i.e.,

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performance enhancing drugs) and their utilization in elite athletes of Maharashtra state.

MATERIALS AND METHODS

Research Design

A descriptive cross-sectional survey design has been employed, where a questionnaire on “knowledge about narcotic drugs” was administered on a large number of track and field athletes.

Subjects

The participants were track and field male Maharashtra athletes (n=210), aged 18-26 years, who represent individual and team sports attending state / national / inter-university competitions. The minimum age of participants was 19 years or older as per inter-university rules. The included participants possessed a maximum five years of experience of playing at national, state or inter-university competitions.

Variable and Assessment

The main variable was “knowledge of narcotics and its utilization” that was assessed among the track and field athletes of Maharashtra state with the help of a standard questionnaire (Shinde and Bera, 2018). The questionnaire consisting of three major dimensions viz. Dimension A (*knowledge of narcotics*), Dimension B (*impact of narcotics on health*) and Dimension C (*use of narcotics*) with twenty questions in each dimension. All the dimensions had a total 60 close-ended questions, which were administered on the selected track and field athletes. Reliability coefficient of the questionnaire was 0.73 whereas the validity coefficient was ranged from 0.68 to 0.71.

Data collection

The data were collected during Maharashtra State Inter-University Sports Meet Krida Mahotsav (Ashwamedh) held at Nanded. Prior permission from the organizers and authorities for data collection was taken. Further, consent from all the participants was taken before data collection. The subjects were requested to fill up the questionnaires in the presence of the investigators in a classroom situation. The room atmosphere, where the questionnaire administered, was favourable and conducive. All the subjects were found very peaceful to respond each question in the questionnaires. The subjects were able to complete the questionnaire within thirty minutes. The survey of “knowledge of narcotics and utilization” on the track and field athletes has been done by administering the questionnaire on two hundred and ten (n=210) track and field athletes.

RESULTS

The result of survey of the dimension-wise status on “knowledge of narcotics and utilization” has been presented in Table 1 that indicates that the mean scores (SD) as expressed in points on “Knowledge of narcotics” (Dimension A), “Impact of narcotics on our health & body” (Dimension B) and “Use of Narcotics” (Dimension c) for the track and field athletes were 31.25 (4.25); 30.15 (4.33) and 28.83 (3.23) respectively. Further, the overall score in “Knowledge of narcotics and utilization” was 90.24 (8.78). According to the norms the mean score 90.24 of almost all the participated track and field athletes falls within the range of average status. Appearance of

this result helps to interpret that the track and field athletes possess a poor knowledge about narcotic drugs and its impact on health. Moreover, about 50% of the track and field athletes belonging to Maharashtra state use some of these drugs as doping and rest 50% were not aware of the impact of using narcotic drugs on health.

Table 1 Status of (Mean and SD) knowledge on narcotics and their consumption among the track and field Athletes in Maharashtra

Variable	Mean	SD
Knowledge of Narcotics (Dimension A)	31.25	4.25
Impact of Narcotics on Our Health and Body (Dimension B)	30.15	4.33
Use of Narcotics (Dimension C)	28.83	3.23
Total Score	90.24	8.78

DISCUSSION

This is a cross-sectional survey study which was conducted with a view to assess the knowledge on narcotics and utilization among track and field athletes residing in Maharashtra state. In this study, standard tool (inventory) was administered to collect the data. Overall result revealed that the majority of participants were unaware regarding the health implications of narcotics though most of them were using it for enhancement of athletic performance. In fact, appearance of such result indicates an alarming status about usages of banned narcotic drugs with half knowledge that might have harmed their health as well as performance and it is very difficult for them to control such addiction. Similar study conducted by Nolte, *et al.*, (2014) determined the attitudes, beliefs and knowledge of talented young athletes residing in Gauteng regarding prohibited *performance-enhancing drugs* (PEDs) and anti-doping rules and regulations. This indicates that the result as appeared in the present investigation seems to be logical.

Moreover, with the interaction among the athletes, it has become evident that drug addiction is spreading very fast in Maharashtra. This investigation, further, suggests that the coaches and sports administrators in Maharashtra must take care of their athletes who are not using narcotics and must provide them proper knowledge about the impact of narcotic drugs including the ill effect of usage of banned drugs. Based on similar findings, Adegboyega (2012) already recommended that Nigerian government should embark on a comprehensive and effective implementation of preventive drug educational programmes for athletes and athletes’ support personnel. Jaime Morente-Sanchez and Zabala (2013) suggested earlier that there is a need to educate elite sportspeople with respect to the doping laws. Earlier research investigations worldwide revealed prevalence of illegal *performance enhancing substance* (PES) use in male adolescents (Hill, 2002; Gradidge, Coopoo and Constantinou, 2011; Molobe, 2012; Takahashi, Tatsugi and Tosihiko, 2013). The present investigation also obtained similar result.

CONCLUSION

This investigation concludes that the majority of the track and field athletes are unaware about ill effects of narcotic drugs on health, and consuming them for enhancement of athletic performance. This is an alarming status about the abusing of

banned narcotic drugs among the athletes and it is very difficult for them to control such addiction. Although the results are based on the respondents' honest responses to the questions asked for, the responses may be susceptible to respondents' bias. Therefore, future studies should consider using biochemical and physiological testing about the usages of narcotics.

References

- Adegboyega, J. A. 2012. Knowledge and use of performance enhancing drugs among Nigeria elite athletes. *Journal of Applied Chemistry*, 1(5): 31-38.
- Bloodworth, A.J., Petroczi, A., Bailey, R., Pearce, G. and McNamee, M. J. 2012. Doping and supplementation: the attitudes of talented young athletes. *Scand J Med Sci Sports.*, 22(2): 293-301.
- Gradidge, Philippe., Coopoo, Yoga. and Constantinou, Demitri. 2011. Prevalence of performance-enhancing substance use by Johannesburg male adolescents involved in competitive high school sports. *Archives of Exercise Health and Disease*, 2 (2): 114-119.
- Hill, Torri. P. 2002. Perceptions of banned drugs in athletics in relation to sport participation, gender, and socioeconomic status (Unpublished master's thesis). West Virginia University: Morgantown, West Virginia.
- Jaime Morente-Sanchez and Mikel, Zabala. 2013. Doping in sport: A review of elite athletes attitudes, beliefs, and knowledge. *Sports Medicine*, DOI 10.1007/s40279-013-0037-x
- Kartakoullis, N.L., Phellas, C., Pouloukas, S., Petrou, M. and Loizou, C. 2008. The use of anabolic steroids and other prohibited substances by Gym enthusiasts in Cyprus. *Int. Rev. Sociol. Sport*, 43: 271-287.
- Kindlundh, A.M., Isacson, D.G., Berglund, L. and Nyberg, F. 1998. Doping among high school students in Uppsala, Sweden: A presentation of the attitudes, distribution, side effects, and extent of use. *Scand. J. Soc. Med.*, 26: 71-74.
- Knotts, G.R. 2000. The central nervous system stimulants in drug abuse. *Journal of American School Health*, 6(10): 535-556.
- Mallia, L., Lucidi, F., Zelli, A. and Violani, C. 2013. Doping attitudes and the use of legal and illegal performance-enhancing substances among Italian adolescents. *J. Child. Adolesc. Subst. Abuse*, 22: 179-190.
- Molobe, I.D. 2012. Knowledge, attitude and practice on drug abuse among sports men and women in Lagos state, Nigeria. *International Journal of Medicine and Medical Sciences*, 2(3): 77-85.
- Nolte, K., Steyn, B.J.M., Kruger, P.E. and Fletcher, L. 2014. Doping in sport: Attitudes, beliefs and knowledge of competitive high-school athletes in Gauteng Province. *S Afr J SM*, 26(3): 81-86.
- Saugy, M., Robinson, N., Saudan, C., Baume, N., Avois, L. and Mangin, P. 2006. Human growth hormone doping in sport. *Br. J. Sports Med.*, 40 (Suppl 1): 35-39.
- Shinde, M. and Bera, T.K. 2018. Development of inventory for assessing knowledge on narcotics in sports person. *Int. J. of Physiol., Nutrition and Physical Education*, 3(2): 106-109.
- Sjoqvist, F., Garle, M. and Rane, A. 2008. Use of doping agents, particularly anabolic steroids, in sports and society. *Lancet*, 371: 1872-1882.
- Striegel, H., Simon, P., Frisch, S., Roecker, K., Dietz, K., Dickhuth, H.H. and Ulrich, R. 2006. Anabolic ergogenic substance users in fitness-sports: A distinct group supported by the health care system. *Drug Alcohol Depend.*, 81: 11-19.
- Takahashi, Masato., Tatsugi, Yukitoshi., and Kohno, Toshihiko. 2013. Investigation of the attitudes of Japanese physical educational university students toward doping in sports. *J Sports Med Doping Stud*, 3(1): 1-6.
- Tokish, J.M., Kocher, M.S. and Hawkins, R.J. 2004. Ergogenic aids: A review of basic science, performance, side effects, and status in sports. *Am. J. Sports Med.*, 32: 1543-1553.
- Yusuf, F.A. 2010. Factors influencing substance abuse among undergraduate students in Osun State. *African Research Review*, 4(17): 330-340.

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