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A study of use of Ergogenic aids among professional boxers in Delhi state

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Abstract

A questionnaire survey was conducted in a group of 100 boxers, with age ranging from 18 to 25 years (mean age: 20.4 years). The subjects were selected from Delhi University with minimum State level participation. The research tool was an questionnaire concerning the frequency of supporting the physical exercise and type of supplements used. Statistical analysis of the results was performed using SPSS software package. The Chi-squared test was used to examine the correlations between frequency of using individual ergogenic aids and the significant test probability was set at 0.05 level. It may be concluded that at an average majority of the boxers are using different kinds of ergogenic aids, the boxers were not aware regarding the affects of the use for ergogenic aids.

Keywords: Ergogenic aids, boxers

Introduction

Up to date sportsmen have been improving their skills each day. Even small changes in performance may influence their rank in the competition. This caused trainers, sportsmen, and scientists to search for further methods, such as using ergogenic aids, in various sports branches. Human beings have been struggling to success for centuries. Many methods have been used, which were believed to enhance performance. It is seen from the records that, in 3rd century B.C. athletes used mushrooms for running faster, gladiators took inductive supplements for fighting better and inhabitants of South America chewed cocaine sprouts for increasing their performance. In the year of 1865, in Amsterdam, canal swimmers used doping making agents; and in 1869 at a bicycle race, participants used excess amount of drugs for the same purpose. First death from a supplement occurred in 1886, when British cyclist took high dose of caffeine. In 1960, at Olympic Games, cyclist K. Jensen died due to high dose of amphetamine consumption. This made the authorities start to consider about the hazards of the supplements. In 1964, in Olympics, sportsmen became to be more muscular than ever, and records were broken successively. Sports committee started to make arrangements and elicit new laws, which stating that doping usage was strictly banned.

In our country and in the world, most prevalent substances used among ergogenic aids are caffeine, energy drinks, and vitamins. Creatine is also catching up. At Barcelona Olympics, sportsmen, who were participating at competitions that require high speed in little time, were reported to use creatine. By then, creatine became to be more popular. However, misusage of these substances can cause major health problems. For instance; requirement of vitamin can be provided by balanced diet, whereas excess amount of vitamin has serious side effects. Similar to vitamin; using steroid, amphetamine, and protein inappropriately can lead to severe health problems. In this research, our aim was to determine the kind of ergogenic aids that boxers were using, their knowledge about them, and the encountered health problems in Northern India.

Objectives and Hypothesis Following objectives was set for the study

- - The study aim towards analysis and evaluation of the use of effective ergogenic aids in a group of Delhi University Boxers.

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Based on the objective following hypothesis was set

• There would be no significant knowledge and awareness found among the Delhi University boxers regarding the use of ergogenic aids.

Research Methodology

A questionnaire survey was conducted in a group of 100 boxers, with age ranging from 18 to 25 years (mean age: 20.4 years). The subjects were selected from Delhi University with

minimum State level participation. The research tool was a questionnaire concerning the frequency of supporting the physical exercise and type of supplements used. Statistical analysis of the results was performed using SPSS software package. The Chi-squared test was used to examine the correlations between frequency of using individual ergogenic aids and the significant test probability was set at 0.05 level.

Results and Discussions

| Type of Supplements | Never | | Periodically | | Constantly | | No Response | |
|----------------------------------|-------|-----|--------------|-----|------------|-----|-------------|-----|
| Type of Supplements | n | % | n | % | n | % | n | % |
| Protein Supplements | 36 | 36% | 36 | 36% | 08 | 08% | 20 | 20% |
| Carbohydrate supplements | 28 | 28% | 44 | 44% | 12 | 12% | 16 | 16% |
| Protein-Carbohydrate supplements | 38 | 38% | 36 | 38% | 12 | 12% | 14 | 14% |
| Isotonic drinks | 12 | 12% | 32 | 32% | 48 | 48% | 08 | 08% |
| Carbohydrate-Protein bars | 27 | 27% | 27 | 27% | 30 | 30% | 16 | 16% |
| Carbohydrate bars | 29 | 29% | 31 | 31% | 20 | 20% | 20 | 20% |
| Creatine | 48 | 48% | 32 | 32% | 12 | 12% | 08 | 08% |
| Caffeine | 50 | 50% | 22 | 22% | 22 | 22% | 06 | 06% |
| Average | 33.5% | | 32.7% | | 20.3% | | 13.5% | |

Table 1: Percentage analysis of the responses regarding the use of ergogenic aids among boxers

Table no. 1 clearly depicts the percentage analysis of the responses regarding the use of ergogenic aids among boxers, which shows that at an average 33.5% boxers never use any kind of ergogenic aids, while 32.7% use them periodically,

20.3% use them constantly and finally 13.5% did not responded. The graphical representation has been shown in fig no. 1

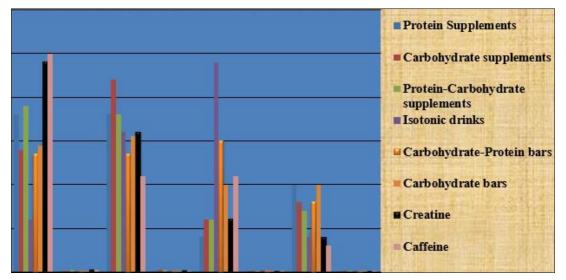


Fig 1: Graphical representation percentage analysis of the responses regarding the use of ergogenic aids among boxers

| S. No. | Responses | Yes | | No | | No Answer | |
|--------|----------------------|-------|-----|-------|-----|-----------|-----|
| | | n | % | n | % | n | % |
| 1 | Coach | 44 | 44% | 52 | 52% | 04 | 04% |
| 2 | Peer Group | 55 | 55% | 45 | 45% | 00 | 00% |
| 3 | Books/Magazines | 32 | 32% | 42 | 42% | 26 | 26% |
| 4 | Websites | 50 | 50% | 32 | 32% | 18 | 18% |
| 5 | Adverts | 27 | 27% | 47 | 47% | 26 | 26% |
| 6 | Self-Experimentation | 50 | 50% | 40 | 40% | 10 | 10% |
| 7 | Others | 12 | 12% | 30 | 30% | 58 | 58% |
| 8 | Average | 38.5% | | 41.1% | | 20.4% | |

Table 2: Percentage analysis of the responses regarding the source for the use of ergogenic aids among boxers

Table no. 2 clearly depicts the percentage analysis of the responses regarding the source for the use of ergogenic aids among boxers, which shows that at an average 38.5% boxers

are influenced by the selected categories for source of information, 41.1% did not and 20.4% did not responded. The graphical representation has been shown in fig no. 2.

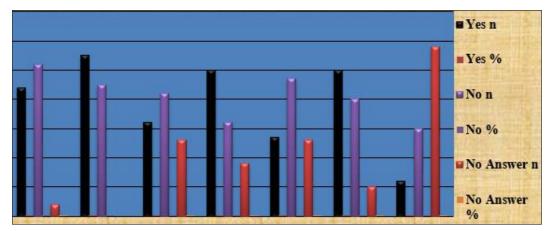


Fig 2: Graphical representation of Percentage analysis of the responses regarding the source for the use of ergogenic aids among boxers

Conclusions

- It may be concluded that at an average majority of the boxers are using different kinds of ergogenic aids
- The boxers were not aware regarding the effects of the use for ergogenic aids.
- At an average 33.5% boxers never use any kind of ergogenic aids, while 32.7% use them periodically, 20.3% use them constantly and finally 13.5% did not responded.
- At an average 38.5% boxers are influenced by the selected categories for source of information, 41.1% did not and 20.4% did not responded.

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