

“A Study to Assess the Knowledge Regarding the Effects of Supplement use During Gym Among Adults in Selected Areas of Pune City”.

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Abstract

Title: - Knowledge regarding the effects of supplement use during gym among adults.

Aim: -To assess the knowledge regarding effects of supplement use during gym among adults

Material and Method: -A quantitative non-experimental descriptive research design was used in this study. The study was conducted in selected gyms of Pune city. Non-probability purposive sampling technique was used. Total 200 adults samples were included in this study. Self-structured questioner was used to assess the knowledge regarding the effects of supplement use during gym. The collected data were analysed by using descriptive, frequency and percentage statistics analysis. Chi-square was used for the association between demographic variable and outcome variable.

Results: - The result revealed that in demographic variables of adults majority 61% are from 18 to 25 years of age. 76.5% are male; 44% were having Diploma in education. Majority 61.5 % are working. Majority 33 % samples income was below Rs 50,000/- income per year and 48% are having mixed dietary pattern. Majority 50.5 % are having average knowledge, 25.5 % having good knowledge & 22 % are having poor knowledge with mean of 8.35 and SD 3.41. Majority 56.5% of the samples have responded the common reason for use of supplement in the gym. Whereas 34.5% of the samples have response the potential risks of taking too many vitamins and minerals in the supplement form. The p-value was more than 0.05 level of significance, so there was no association between knowledge regarding the effects of supplement use during gym with selected demographic variable. **Conclusion:** - In this study, it was concluded that an average level of knowledge regarding the effects of supplement use during gym workouts. While some individuals may have a basic understanding of common supplements and their purposeful benefits, there is often a lack of comprehensive understanding regarding their potential risks, proper dosage, and individual suitability. This knowledge gap can lead to misconceptions, misuse of supplements, and even potential health risks. Therefore, there was a clear need for further education and awareness campaigns to ensure that adults are equipped with accurate information to make informed decisions about supplement use in the context of their gym routines

Keywords: Knowledge, Adults, Gym, Supplement.

Introduction

Regular exercise and a well-balanced diet are critical components of optimal health, because they lower the incidence of obesity and the onset of other comorbidities, sport, physical activity, and an active lifestyle are essential to maintaining a state of well-being. Gyms are frequently visited by adults to preserve or enhance physical attractiveness and functional ability. Frequent exercise raises the body's need for energy and nutrients as a result, diet is crucial for improving performance, adapting to training, replenishing energy reserves and

minimizing weariness and recuperation time. To improve the quality and amount of nutrients ingested, a person may take a supplement that contains nutrients that are synthetic or derived from dietary sources. Dietary supplements can also include minerals herbs other botanical amino acid enzymes and a host of other components in addition to nutrients. The majority of supplement products are consumed by gyms and other groups of people may adopt this habit. Supplements are generally consumed by gym goers for a variety of purposes including improving performance building muscle mass gaining weight boosting immunity and more. Persons involved in bodybuilding have proven to be one of the groups with a very high prevalence of DS use with significant associated risks for health There are side effects of taking supplements such as feel jittery, increase water retention, trigger mild reactions, digestive upset, headache other than that long-term complications and risks such as liver or other organ damage, reduced bone strength, fetal development abnormalities, increased risk of bleeding, changes in response to anaesthesia, nervous system damage. Trainers/instructors must therefore be adequately informed to be able to provide accurate information about the supplement intake. However little was known about the supplement intake among individuals working out in gyms. The majority of people are concerned about their appearance, which is influenced by the desire to gain muscle gain weight and have a perfect body.

Needs of the Study

Supplements may contain a range of substances, vitamins, minerals, and amino acids. The gym patron will benefit from the supplements. Help raise workout efficiency boost tolerance or increase strength or endurance. As time goes on, the effects of supplements will become more and more apparent, impacting every bodily organ in the person. Anything that is added to something else to make it better or complete. Nutritional supplements that come from both plants and animals. Bodybuilders eat more supplements in the gym which can assist manage certain health conditions and enhance overall. Dietary supplements used by those engaged in bodybuilding weightlifting and mixed martial arts are known as body building supplements because they help promote the growth of lean body mass. There are both authorized and illicit supplements. According to research done 39% of individuals use supplements for work. ⁽³⁾ Non-competitive gym users regularly take dietary supplements for a range of reasons such as improving performance building muscle decreasing weight and increasing physical fitness for cosmetic reasons. It is essential to have a thorough grasp of these goods in order to prevent misuse and to guarantee that you know what a supplement is and how to use it correctly. Supplemental information is obtained from untrained workers publications protein stores the internet and social media.

Scholar view : In Researcher point of view majority of the adults have visited gyms in order to keep their body fit and fine and to maintain proper body posture. During their work out some may use different types of gyms supplement in order to make their body more fit but they have enough knowledge about the effect of supplements .According to the study conducted in Italy in 2022,it shows that majority having sufficient knowledge about the supplements. And they conducted about the sports supplements among the professional and non- professional sportsmen. Both males and females participated in this research study.

Aim of the Study

The aim of the study was to assess how common supplement use is among gym goers.This study will help in identify knowledge of adults regarding effects of supplement use during gym. Previous studies have showed that the gym environment does not promote the dissemination of accurate information on the significance of supplements, and adults have inadequate nutrition knowledge. Given the significance of nutrition for adults initiatives to raise gym patrons and trainers awareness of nutrition must be implemented.

Research Methodology

Objective of the Study

Objective of the Study: 1.To assess the knowledge regarding effects of supplement use during gym among adults in selected areas of Pune city.2. To associate the findings with selected demographic variables. Quantitative research approach was used and Non-experimental descriptive research design was applied in this

study. Research variable was knowledge regarding effects of supplement. The sample of group of the study was adult's age 18 years to 40 years. Sample size was 200. Sample technique was Non- probability purposive sampling Self-structured questionnaire tool was used. Data Collected was analysed. By using frequency, percentage and chi-Square test for reliability test-Retest method kal person formula was used and the value of reliability was 0.94. 50, tool was found as reliable. Pilot study was done on 20 samples and their response were collected . Hence, the study is found feasible.

Result

Section I: Analysis of data related to demographic variables in terms of frequency and percentage.

This section shows the demographic variables of adults. Majority 61% of adults are from 18-25 years of age, 76.5% are male; Majority 44% were having Diploma education.

Majority 61.5 % are working and Majority 33 % samples income was below 50,000/- income per year. As were as 48% were having mixed dietary pattern.

Section II

Table I Analysis related to the Knowledge regarding the effects of supplement use during gym.

Level of knowledge	Frequency	Percentage%	Mean	SD
Poor	44	22	8.35	3.41
Average	101	50.5		
Good	51	25.5		
Excellent	4	2		

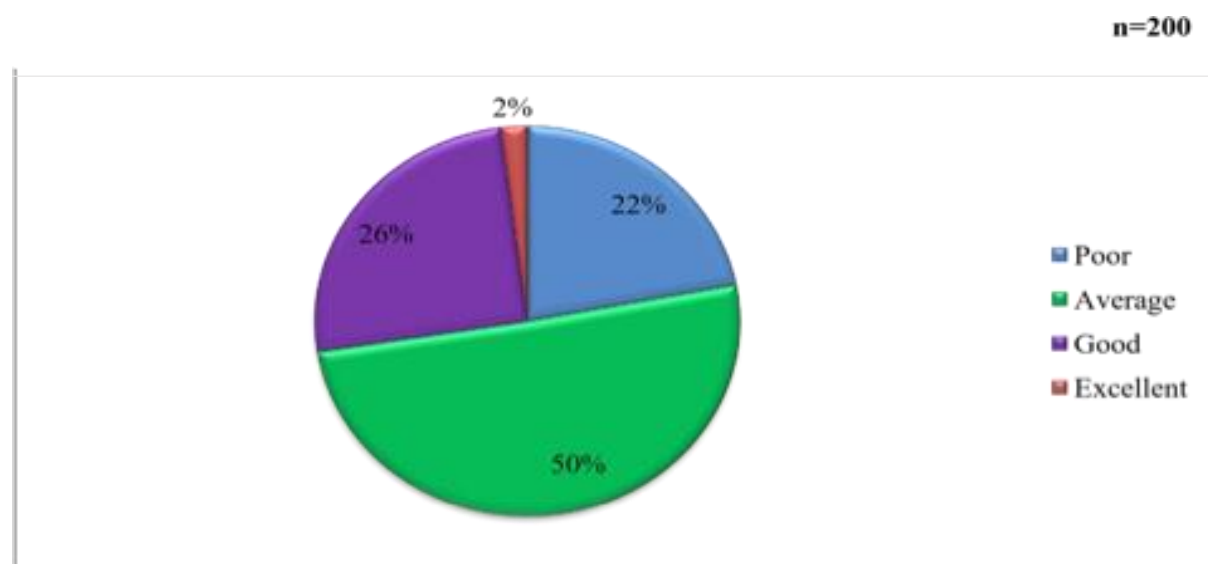


Fig no 1

Above table shows the Knowledge regarding the effects of supplement use during gym. Majority 50.5 % are having average know ledge, 25.5 % having good know ledge & 22 % are having poor knowledge with mean of 8.35 and SD 3.41 regarding use of supplement during gym.

Section III:

In item analysis the majority 56.5% of the sample have responded the common reason for use of supplement in the gym .Whereas 34.5% of the samples have response the potential risks of taking too many vitamins and minerals in the supplement form.

Section IV

Analysis related to association between knowledge regarding the effects of supplement use

during gym with selected demographic variables. Hence the p-value was more than 0.05 level of significance, so there was no association between knowledge regarding the effects of supplement use during gym with selected demographic variable.

Discussion

The study's objective was to evaluate the knowledge of people in particular Pune city regarding the effects of supplement use during exercise. Non-experimental purpose research method was employed in this study, which takes a quantitative research approach. Knowledge about the impact of supplement consumption is the research variable. The demographic was chosen as a target and reachable population based on the criteria. Sample was chosen based on inclusion criteria .The study was carried out in a few Pune city gyms.

200 samples were selected for the study using non-probabilistic purposive selection methods. According to the analysis the outcome of study knowledge regarding effects of supplement useduring gym, 22% have poor knowledge, 50.5% have average know ledge, 22.5% have good Knowledge and 2% have excellent knowledge. Similar study was done in 2021, Use of Dietary Supplements in Fitness Practitioners: A Cross-Sectional Observation Study. This study was aimed at evaluating the prevalence of use of dietary supplements among gym users and gym instructors involved in body shaping-oriented fitness training and also verify whether differences existed in the prevalence and in the types of DSs used in both gym users and gym instructors. A survey was distributed to 316 participants, composed of 89 gym instructors and 227 gym users of both genders aged 27.3 ± 7.7 . Among these participants, 52 were involved in competitions and 248 were not, while 16 participants did not specify either way. The results showed a high prevalence in the use of DSs in the population considered, with 85.4% of the participants declaring they used DSs, with high heterogeneity in the numbers and in the combinations used. No differences were found between gym instructors and gym users The results indicate that DSs are widely used by persons involved in body shaping-oriented fitness training. The results also suggest that the majority of the participants decided individually which DSs to use.

Conclusion

It was concluded that many adults possess only an average level of knowledge regarding the effects of supplement use during gym workouts. They were less aware about the side effect of taking supplement during gym workouts. Every gym instructor should be well trained and qualified who can lead, instruct and motivate individuals or groups. A healthy diet with adequate amounts of healthy carbohydrates, protein, and water is sufficient to fuel the body While some individuals may have a basic understanding of common supplements and their purposeful benefits, there is often a lack of comprehensive understanding regarding their potential risks, proper dosage, and individual suitability. Heavy exercise increases oxygen consumption, which promotes oxidative stress in the body and can damage cell membranes.

Overloading on supplements can cause cramping, elevated blood pressure, irregular heartbeat, nausea and severe problems with the digestive system or kidneys. Thus it is very important to feel the knowledge gap which can lead to misconceptions, misuse of supplements, and even potential health risks. Therefore, clear need for further education and awareness campaigns to ensure that adults are equipped with accurate information to make informed decisions about supplement use in the context of their gym routines. The population should receive more attention from medical experts.

Conflict of Interest

All author declares that there is no involvement with any organization or entity with any financial or non-financial interest in the subject matter

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