



ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING SUPPLEMENTS & ITS USE AMONG STATE & NATIONAL LEVEL PLAYERS

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ABSTRACT

Dietary supplements are consumed in large quantities among the youth now a days. The purpose of this study was to assess the knowledge, attitude and practice (KAP) regarding supplements and its use among state and national players. The cross-sectional study (knowledge, attitude and practice) was conducted at Netaji Subhas National Institute of Sports and Punjabi University, Patiala. Total 198 Players were tested which comprised of 70 male and 29 female players in each category. The tool used to collect the data was semi-structured questionnaire which was developed to assess KAP regarding the supplements. The mean height of the subjects was 169.4cm±3.0 cm and 175cm±12.3cm for state players & national players respectively. The mean weight of the state players was 70.4kg±11.9kg and 73.2Kg±13.6Kg for National Players. The result indicates that 90% players knew about supplements but they did not know how to use them. About 86% of the subjects said that consuming supplements was helpful and 11% said that it was not helpful. Despite of awareness and non-awareness, subjects have variants of thoughts regarding supplements. No statistically significant difference was found in both the groups with reference to use of dietary supplements. The total KAP score depicts that majority of players had knowledge but need more guidance and counselling regarding the use of dietary supplements.

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INTRODUCTION

During the last decades, use of recovery means have become an important aspect for enhancement of sports performance. The use of dietary supplements as a recovery mean has increased tremendously. Dietary supplements are food products, which contains at least one of dietary ingredients such as vitamin, minerals, herb or other botanical, amino acid, metabolite, constituent, extract, or combination of any of these (Chandika, 2017). The different types of dietary supplements are available in the Indian market such as protein supplements, multivitamins, herbs and sports drinks etc. Youth involved in sports in India majorly use protein supplements, multivitamins, multiminerals and health drinks along with herbs for treatment of health conditions or health promotion (Kemper, 2003; Kennedy, 2005). Apart from these, supplements to gain or loss weight are also available in market. Due to rapidly increasing participation and performance density in sports the consumption of performance enhancing and recovery supplements has been increased rapidly. To achieve best results in short span of time, over or improper use of dietary supplements to treat self-diagnosed conditions and to enhance

performance is increasing among the young players (Dietary Supplements, 2017). There is low level of concern regarding potential adverse effects and drug-supplement interaction potential which is due to the lack of “knowledge” about proper consumption of these products.

Similar Studies in this domain with respect to players Knowledge and consumption of supplements is lacking behind. Therefore, the purpose of the present study was to analyse the Knowledge, attitude and practice regarding supplements and its use among state and National Players.

MATERIAL AND METHODS

The cross-sectional study (knowledge, attitude and practice) was conducted at Netaji Subhas National Institute of Sports and Punjabi University, Patiala. The players of state and national levels (male and female) were involved in the study. The data was collected on 198 players. The sample consisted of 99 State level Players and 99 national level players. To collect the data semi-structured questionnaire cum interview method was used to elicit information. Anthropometric Measurements like height and weight were recorded with anthropometric rod and weighing scale and BMI (Body mass index) was calculated. The questionnaire consisted of different

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sections based on Knowledge, attitude and practice regarding supplements.

Statistical Analysis

The complete questionnaires were numerically coded and frequency was calculated using the Statistical procedure. In present study Arithmetic mean, Standard deviation and chi-square test were used to compare the data. The results for categorical variables are presented as N (%).

RESULTS AND DISCUSSION

Table 1 Distribution of the subjects on the basis of the Awareness about the term supplements

Awareness/Knowledge about Supplements		State		National		P-Value
		N	%	N	%	
Know About Dietary Supplements?	Yes	97	97.97	82	82.82	0.00**
	No	2	2.02	17	17.17	
Consuming Supplements is Good?	Yes	93	93.93	86	86.86	0.091
	No	6	6.06	13	13.13	
Attended any health campaign workshop	Yes	19	19.19	22	22.22	0.599
	No	80	80.8	77	77.77	
Information source	Coach	70	70.7	49	49.49	0.066
	Friends	22	22.22	29	29.29	
	Media	4	4.04	3	3.03	
	Internet	5	5.05	13	13.13	
From where buy supplements?	Others	3	3.03	6	6.06	0.005*
	Retail store	59	59.59	59	59.59	
	Trainer	29	29.29	14	14.14	
	Online	3	3.03	13	13.13	
Professional help for using dietary supplements	Yes	32	32.32	34	34.34	0.763
	No	68	68.68	62	62.62	
Money spent on DS	<1000	24	24.24	20	20.2	0.001**
	1000-3000	48	48.48	28	28.28	
	3000-5000	12	12.12	24	24.24	
	>5000	13	13.13	29	29.29	

From the table1 shows that, the majority of the subjects 97% state and 82% National knows about the dietary Supplements and it is statistically highly significant. 93% State Players and 86% National Players says that consumption of dietary Supplements was good while 9% of the total subjects says that consumption of supplements was not good. Only 20% State Players and 22% National Players has attended health campaign. Majority of the Players 70% State and 50% National get information about supplements from Coaches. Maximum Players (60% State and 60% National) usually buy the supplements from Retail Store and rest 29% state and 15% national buy from the Trainer. Both state and national players do not seek any professional help for using dietary supplements. As per the data, maximum players spent 1000-3000 rupees on dietary supplements on a monthly basis. Maximum subjects use supplements to sum up, majority of the subjects have knowledge about supplements but there is no scientific significance.

Table 2 Distribution of the subjects on the basis of the attitude

Attitude Regarding Supplements		State		National		P-Value
		N	%	N	%	
Use of supplements is always safe	Yes	65	65.7	56	56.6	0.415
	No	23	23.2	30	30.3	
	Don't Know	11	11.1	13	13.1	
Feel it helps?	Yes	86	86.9	82	82.8	0.629
	No	11	11.1	13	13.1	
Any Adverse effect?	Don't Know	2	2	4	4	0.853
	Yes	28	28.3	28	28.3	
	No	65	65.7	63	63.6	
General health after using Supplements?	Don't Know	6	6	8	8.1	0.17
	Yes	79	79.8	69	69.7	
	NO	14	14.1	17	17.2	
Interact with each other?	Don't Know	6	6.1	13	13.1	0.565
	Yes	46	46.5	47	47.5	
	No	37	37.4	41	41.4	

From the table2 it was revealed that the attitude of the subjects regarding the Supplements and its association with importance of supplements has no significant difference. About 86% of the subjects say that consuming supplements was helpful and 11% say that it was not helpful. Despite of aware and not aware, subjects have variants of thoughts regarding supplements.

Table 2.1 Distribution of the subjects regarding the attitude of the subjects about dietary supplements

Attitude Questions	A	State (%)			National (%)			P-Value	
		DA	SA	SDA	A	DA	SA		SDA
Do you think supplements may enhance your performance?	89.89	1.01	9.09	0	81.8	1.01	15.1	2	0.242
Do you think consuming supplements might increase aggression to train hard?	68.68	21.21	6.06	4.04	44.4	33.3	14.1	8.1	0.006
Do you think supplements may enhance your endurance?	85.85	1.01	12.12	1.01	83.8	7.07	9.09	0	0.114
Do you think supplements make healthier?	81.81	7.07	10.1	0	72.7	9.09	15.2	3	0.179
Do you think supplements provide more energy?	91.91	4.04	4.04	0	88.8	1.01	9.09	1	0.189
Do you think Supplements increase the amount of training you can undergo?	86.86	8.08	4.04	1.01	83.8	4.04	11.1	1	0.199
Do you think Supplements improve your concentration?	51.51	35.35	9.09	5.05	58.58	19.19	17.2	5.1	0.051
Do you think Supplements increase the strength?	85.85	4.04	6.06	2.02	81.81	2.02	14.1	2	0.253
Do you think Supplements increase the ability to cope with pain?	42.42	39.39	13.3	5.05	37.37	44.44	12.1	6.1	0.862
Do you feel sports bodies need to provide education about supplements?	87.87	9.09	3.03	0	92.92	2.02	5.05	0	0.109
Are you aware of consuming of supplements act as a gateway drug	34.34	57.57	6.06	1.01	30.3	55.55	5.05	9.1	0.19

*A: agree, D: disagree, SA: somewhat Agree, SDA: somewhat disagree

From the table2.1 it was depicted that the attitude of the subjects regarding supplements was not significant. Majority of players has positive attitude regarding supplements. Maximum number of subjects have a Neutral attitude. There are high chance they might have knowledge or might have not knowledge about supplements. Statistically it was highly Significant.

Most of the subjects 60% State and 40% National consumed supplements after competition. Statistically, it was significant. It was revealed that in both the groups (State and National), majority of the players consume whey protein (81% State and 82% National). Players are also involved in consuming Multivitamins, Evion 500, BCAA, Creatine, Electrol etc. It was prevalent through the data that maximum players were consuming large amount of protein supplements irrespective of the awareness about the dosage and the use of protein supplements.

DISCUSSION

So many surveys concerning supplements were conducted in varied populations. In our study which is one of its kind as it was conducted on the population which are directly related to the consumption of supplements. The result of this study suggests that more education on Dietary Supplement is necessary so that proper usage of supplements is implemented. Similar study by (Owens,2014) indicates that dietary supplements are often used in combination with pharmaceuticals and there is continuing need for clinicians to assess patients' use of these products and to provide direction for their appropriate place in therapy. In our study, majority of the respondents received the information from Coaches and friends and the subjects were consuming supplements without any professional help. Regarding the reasons for consuming nutrition supplements among Players, the majority of the respondents used supplements to enhance performance. Similar findings were reported in the study done by (Sharma A, 2014). In a nutshell, use of dietary supplements in players was high and according to the study results it was suggested to improve knowledge of players regarding use and dosage of the supplements use so that improper use of supplements would be suppressed to avoid long term health issues among the targeted population. The role of nutritional supplements in health, performance and diseases must be highlighted in the players training program with the objective of right intervention of supplements to improve health and performance of the players.

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