



ASSESSMENT OF KNOWLEDGE ABOUT AAHAAR AND VIHAAR AMONG UNIVERSITY STUDENTS

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ABSTRACT

Objective of Ayurveda is to achieve optimal health and well-being through a comprehensive approach that addresses mind, body, behavior, and environment. Daily as well as seasonal, dietary and lifestyle recommendations has been described to promote health. Harmful diets and activities have been identified to prevent diseases. Against this background a cross sectional study was conducted with the purpose to assess awareness and knowledge of dietary and life style interventions prescribed by Ayurveda among the students of Panjab University. Study tool used was a questionnaire containing 30 questions. 150 students were surveyed in campus of Panjab University. Statistical analysis was done by using the SPSS. Results revealed that knowledge about Ayurvedic dietary and lifestyle recommendations significantly depends upon stream of study and background of students. Many respondents assumed mentioned practices as true but few were aware that these are recommended by Ayurveda. Ayurveda is science of life and focuses on preventive approach. There is strong need to promote Ayurveda as a system of medicine as well as health.

Key words: Ayurveda, Diet, Lifestyle, Knowledge, Awareness

INTRODUCTION

Ayurveda, the ancient Indian life science, takes an integrated view of the physical, mental, spiritual and social aspects of human beings. It is not merely a system of medicine; rather it is a way of life that aims to increase lifespan by preventing or delaying the aging process^{1,2}. This comprehensive, natural health care system has been utilized for more than 5000 years for prevention, health promotion, and treatment of disease³. Its objective is to create optimal health and well-being through a comprehensive approach that addresses mind, body, behavior and environment⁴.

Ayurveda aims to keep these structural and functional entities in a state of equilibrium which signifies good health. Emphasis on healthy diet and healthy life style is given to achieve state of equilibrium. Any imbalance due to internal or external factors causes disease and the treatment consists of restoring the equilibrium through various techniques, procedures, regimen, diet and medicine.

Ayurveda views faulty diet as not only contributing to specific degenerative diseases, but also throwing off the body's natural balance, thus weakening immunity. Food is viewed as providing matter, energy intelligence, order, and balance⁵. A wholesome diet is essential not only for maintaining health but also for fighting diseases. Intake of proper quantity of food promotes longevity, does not aggravate the doshas, and maintains the digestive capacity. According to the Ayurvedic texts there are certain rules to be followed regarding the arrangement of food, eating habits, basic cleaning habits etc which a person if follows will lead a long and disease free life.

Similarly, daily activities and routine jobs determine the healthy and diseased state of body. Lifestyle is the key to maintain and restore dosha balance. According to Ayurvedic principles, each individual's diet and routine

activities should be suited to his or her prakriti. And, during times of vikriti, or imbalance, the diet can be used to either decrease or increase the three doshas until balance is restored. Diet and lifestyle activities should be modified seasonally. Dinchrya and rituchrya describe various rules about diet and lifestyle which should be followed in daily and yearly routine.

These tenets of Ayurveda are deeply rooted in traditions and daily life of Indian community. Yet in recent history, ayurveda has lagged behind in being the most favoured approach to medicine due to various causes. The present study was undertaken to gain an insight into the level of awareness and knowledge regarding Ayurveda especially the aspects of diet and lifestyle. It was thought that an understanding of this would provide the basic point from which the campaign to revive the Ayurveda practices should begin.

MATERIAL AND METHOD

A cross sectional study was conducted in campus of Panjab University, Chandigarh. A random sample of 150 students was selected. The study tool for this investigation was a questionnaire. Based on a comprehensive review of the literature, 30 statements were designed. 15 questions were regarding dietary recommendations and 15 were related to lifestyle recommendations. Questionnaire written in English was prepared and was hand distributed to students. The respondents were asked to give their response to the questions by writing "true" (agree), "false" (do not agree) or "can't say" to the answer. The respondents were asked to confirm or negate whether it is an ayurvedic recommendation. Source of information for every statement was also asked. Additional information was gathered on demographic variables, such as age, gender, marital status, as well as qualification, stream of study and residence. Each blank space was considered a

missing value. After analyzing the responses, a score of 1 was given for the correct answer and 0 for other answers (wrong, missing or “can’t say” answers). The maximum score that any respondent could obtain if all the responses were correct was 30. The knowledge portions of the data were scored and assessed as percentage scores. Mean scores for the knowledge about ayurvedic recommendations diet and knowledge about ayurvedic

recommendations on lifestyle were later analyzed for the minimum and maximum values, mean, median, mode and standard deviation. Data were analyzed using SPSS program version 16. Results were cross-tabulated and chi-squared calculated. The Pearson correlations were also calculated and a p value of <0.05 was considered significant.

Table 1: Socio-personal characteristics and mean scores of respondents

Characteristics	Number	Percentage	Mean scores
Sex			
Male	74	49.3	18.22
Female	76	50.7	18.61
Age			
20-25	24	16.0	17.75
26-30	92	61.3	18.57
31-35	34	22.7	18.61
Educational level (pursuing)			
Graduation	28	18.7	17.24
Post graduation	112	74.7	18.77
Doctoral	10	6.7	18.00
Stream of study			
Science	55	36.7	17.07
Non- science	95	63.3	19.21
Background			
Urban	61	40.7	17.49
Rural	89	59.3	19.06

Table 2: Knowledge test items with the most correct responses

Items	% of correct responses
Milk should not be taken after eating fish	94
Curd should not be taken in dinner	90
Old wheat and rice are better to eat than newly harvested	86
Diabetic person should go for regular walk	82
It is good to have body massage in winters	80.6

Table 3: Knowledge Test items with least correct answers

Items	% of correct responses
drop of oil should be applied in nostrils in morning	36
Banana and milk (banana shake) should not be taken together	40.6
Honey should not be taken when hot or with hot items	44
One should not sleep in day time except for summers	49.3

RESULTS AND DISCUSSION

Profile

The results showed that males made up 49.3% and females made up 50.7% of sample. All the respondents were within the age range of 21 to 35 years. Most of the respondents (61.3%) were in the age groups of 26-30 years. Maximum respondents (74.7%) were doing post graduation whereas 6.5% are pursuing PhD. Majority of respondents (63.3%) were non science students. 59.3% of students belongs to rural area while 40.7% belong to urban area. Socio-personal characteristics has been shown in Table 1.

Scores

The overall knowledge score that was obtained by the respondents ranged between 10 and 25 with a mean of 18.42, median 18, mode 19 and Standard Deviation of 2.87.

Knowledge score for dietary recommendations that was obtained by the respondents ranged between 6 and 13 with a mean of 9.8, median 10, mode 10 and Standard Deviation of 1.51. Knowledge score for lifestyle recommendations that was obtained by the respondents ranged between 4 and 12 with a mean of 8.6, median 9,

mode 9 and Standard Deviation of 1.58. Sub scores on dietary recommendations are higher than sub score on lifestyle recommendations.

Mean score of females was 0.39 higher than males. Mean score of respondents of age group 31-35 years was highest (18.61) while of age group 21-25 was lowest (17.75). As far the impact of education is concerned, on average, a student doing Post graduation had 0.77 higher scores, compared to PhD students and 1.53 higher than graduation students. While non science students performed much better by getting 2.14 higher score as compared to science students. Students belonging to rural area have 1.57 higher scores than students belonging to urban areas. Mean score of respondents by various socio-personal characteristics is shown in Table 2.

Association between gender and knowledge

In examining the observed cell frequencies, it can be concluded respondents' knowledge is independent of gender ($\chi^2=13.851$, $p >0.05$) where $p =0.46$. The null hypothesis is accepted as the p-values are more than 0.05.

Relationship between the students' age and their knowledge

Output of Pearson correlation for overall knowledge score and age was found ($r = 0.093$, $p > .05$), where $p = 0.257$. The p-values is greater than the alpha value, that is $p > .05$, therefore, we cannot reject the null hypothesis concluding there is not significant relationships between students' age and knowledge.

Relationship between the students' qualification and knowledge

Significant correlation was not found between education level and knowledge score ($r = 0.142$, $p > .05$), where $p = 0.083$). This suggests that knowledge level and education status are not related.

Association between knowledge score and stream

An association between knowledge score and stream of study was observed ($\chi^2 = 27.030$, $p < 0.05$) where $p = 0.019$. Furthermore, the minimum expected cell frequencies for training status is 37 which is greater than 5; which means one of the main assumptions of chi-square has not been violated. Non science students performed better than science students.

Association between knowledge score and residential background

Knowledge score was significantly dependent on residence background as p value is less than 0.05 ($\chi^2 = 23.829$, $p = 0.048$). The minimum expected cell frequencies for training status is 41 which is greater than 5; which means one of the main assumptions of chi-square has not been violated. Bodeker *et al* (2005) found that for vast majority of rural population traditional medicine is still main source of healthcare⁶.

Most correct and least correct responses

The most common forms of knowledge were not to take milk after fish (94%) followed by not to take curd in dinner (90%). 82% knew that diabetic persons should go for regular walk. Body massage was considered good in winters by 80% of respondents. Table-3 highlights the most correct responses. 36 % of respondents consider that application of oil in nostrils is not good. 59.4% of respondents consider that banana and milk taken together is good for health, although Ayurveda does not consider this combination good. Knowledge statements with less than 50% correct answers are given in Table 3.

Awareness about ayurvedic nature of recommendations

On average, 12.8 statements were marked as ayurvedic recommendations. Similarly on average 7.6 statements related to dietary recommendations and 5.2 statements related to lifestyle recommendations were considered as *Ayurvedic*. Respondents related more dietary recommendations to Ayurveda than lifestyle recommendations. Most responses marked as Ayurvedic recommendation were not to take milk after fish (92%), to take kulth dal in renal stones (83.3%), and to take jau atta in diabetes (82%). To clean teeth two times a day and boiling of water before drinking especially in rainy season were not considered as Ayurvedic recommendation by majority of respondents.

CONCLUSION

It can be concluded that non science students and students with rural background had more knowledge regarding Ayurvedic concepts. However relation of knowledge about Ayurvedic concepts and gender, age and education status was not found. Many respondents assumed mentioned practices as true but few were aware that these are recommended by Ayurveda.

The present study is recommended to be done with larger sample so that factors impacting the popularity and usage can be understood and worked upon.

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