

NUTRITIONAL KNOWLEDGE OF DOCTORS OF UDAIPUR CITY

Mamta Singh*, Aarti Sankhla **, Vimla Dunkwal*** and Swati Yadav****

ABSTRACT

The findings of the study on nutritional knowledge of 70 doctors of RNT Medical College, Udaipur revealed that majority of them were familiar with food sources of vitamin A, C, E and iron, whereas & only two doctors were able to enlist correctly the basic food groups. The concept of clear liquid diet, full liquid diet and normal liquid diet were familiar with light and bland diet. Responses on therapeutic nutrition showed that the concepts of different types of diet and their recommendation for selected diseases were not known to most of the subjects. More than 90 percent of the subjects correctly answered that normal diet should be modified by changing their consistency energy value and nutrient content. 90 percent of the subject possessed opt knowledge on the inclusion of milk and dhal in tuberculosis. Strained fruit juices can be given freely to a patient having diarrhoea was accurately reported by more than 60 % of the subject. Similarly, knowledge about inclusion and exclusion of food items was satisfactory. In general, doctors had favorable attitudes regarding significance of nutrition and were of opinion that nutrition subject be included in their MBBS curriculum and a dietician be appointed in every hospital. Almost all of them considered them selves as one of the person responsible for diet counseling and agreed to have adequate knowledge of therapeutic nutrition.

INTRODUCTION

The body in its natural sense is the minor image of food one eats. The role, food performs in health under emphasized since life appeared on earth. Anderson *et al.*, (1982) has rightly commented "If the knowledge of the relationship of adequate diet to health, discovered in the past is to benefit today's infant, children and their families, each generation must receive nutrition counseling. So, the need of scientifically sound and effective counseling to be of prime importance in protecting and promoting good health".

The surveys carried out so far have revealed that the teaching community as a whole, responsible for educating masses are inadequately equipped with knowledge about diet and nutrition (Schapira *et al.*, 1990). Further Nutritionist: 'nutrition specialist skilled in interpreting principles of nutrition to individual and groups' and dietician: 'the translator of the science of nutrition into the skill of furnishing optimal nourishment of people' has a prime responsibility of counseling. But, unfortunately in India, they are not

so well equipped with the resources. Though, a few counseling centers during the last two decades have been established but their confinement to metropolitans i.e. a smaller section of population leave us with no other choice to think except the people of treatment of disease as the right source of communication where each and every individual has to be in touch on and often. Hence, the physicians are the pivot around whom health services revolve. At present, the major focus of medical doctors in hospital in on treating diseases, on developing skills in surgery and medicine. Thus, the important role of nutrition in health and disease is neglected. In fact, the nutritional study of many of the malnourished patients get aggravated due to lack of attention to the important aspects of human nutrition. The important role that the doctors can play in nutrition education directed our attention to frame the present investigation on "Nutritional knowledge of Doctors of Udaipur City".

RESEARCH METHODOLOGY

The study was conducted within the municipi-

* Guest Faculty, College of Home Science, Bikaner

** Dean, College of Home Science, MPUAT, Udaipur

*** Associate Professor, Dept. of Food & Nutrition, College of Home Science, SKRAU, Bikaner

****Research Scholar, Dept. of Food & Nutrition, College of Home Science, SKRAU, Bikaner

pal limits of Udaipur city in 2007, where a medical college and attached group of government hospital (RNT medical college) cater to the need of patient coming from all over Rajasthan. All the doctors working in government hospital were taken as a study sample. A pre-tested reliable and valid tool, questionnaire developed by Sankhala and Mandot (1996) was used for collecting data. The respondents were contacted personally in hospital and were apprised about nature of the study. There were total of 100 subjects out of whom only 70 doctors finally responded 10 of them returned without filling the questionnaire and 20 were such who did not co-operated and despite every effort & reminders returned the questionnaire. The collected data were coded and tabulated, the response of each subject were assessed in terms of frequency and percentage distribution of respondents giving correct answer of each individual question.

RESULTS AND DISCUSSION

Personal particulars

The information gathered from individual respondent on their age, sex, religion, food habits have been suitable classified. The age of the study group ranged from 25 to 58 years. Out of 70 respondents 58 (78%) were male and 12 (14%) were female. Ninety percent of them were Hindu and only one each Muslim and Sikh. When classified on the basis of their food habits more than 50 percent were vegetarian and those who were non-vegetarian in their dietary habit constituted 24 percent and only five were ova vegetarians.

Nutritional knowledge of subject

Responses on definition of the terms nutrition, balanced diet and the knowledge of the subjects about basic food groups which revealed that 19 (27%) were aware with the terms nutrition, 18 (25%) were aware of the concept of balanced diet. Only two subjects were able to enlist basic food groups. From Table 1 variability in the responses can be discerned, that high degree of knowledge about the source of vitamin A, C, E and iron was observed. Only 5 respondents knew about the sources of vitamin K. More than 15 percent of the subject had information about Thiamin, Riboflavin & Niacin. Knowledge about sources of folic acid was nil among the respondents.

Therapeutic Nutrition

According to Davidson *et al* (1975), Therapeutic diets have three main uses firstly these diet acts as medicine, secondly reduce the recovery period of disease and thirdly avoid occurrence of deficiency disease.

Unlike the performance of subject in defining the terms pertaining to normal nutrition, the knowledge of subjects regarding basic concept of therapeutic nutrition was 62(88%) which is slightly higher than as compared to other responses. As high as more than 90 per cent of subjects were of the view that normal diet should be modified by changing the consistency, energy value and their nutrient content. The concept of clear liquid diet i.e. 21 (30%), full fluid diet more than 30 per cent and 55 per cent for normal diet were clear to some extent to the respondents whereas less than 10 percent of them were familiar with light diet and bland diet.

Figure presents the correct diet in different disease chosen by the respondents. It was noted that 60 per cent were able to respond correct answer regarding diet to be given in tuberculosis and more than 40 per cent knew appropriate diet for diarrhoea, peptic ulcer and constipation. Lack of knowledge in respect to the principle diet recommended during hypertension was observed where only nine subjects gave right answer.

Table 1 reveals that with an equal percentage i.e. more than 90 percent of the subject possessed apt knowledge on free inclusion of milk in tuberculosis. Strained fruit juices can be given freely to a patient having diarrhoea was accurately reported by more than 60 percent subjects. Increased intake of fiber through raw vegetable and whole grains helps in prevention as well as treatment of constipation. In the present study, most of the subject (ninty percent) had absolute knowledge of inclusion of raw vegetables and fruits. More than 80 percent of subject extended their views about the inclusion of milk and cream as a dietary modification for peptic ulcer patients.

Besides prescribing medicine, the physician is required to act as a nutrition educator also, where he expected to have adequate knowledge of nutrition. Physician too endorse this view as evident from a

Table 1: Distribution of subjects in view of correct responses in respect of sources of nutrients (n=70)

S.No	Nutrient Sources	f	%
1.	Protein	27	38.57
2.	Vitamin A	58	82.85
3.	Vitamin D	22	31.42
4.	Vitamin K	5	7.14
5.	Vitamin E	33	47.14
6.	Vitamin C	46	65.17
7.	Thiamin	20	28.57
8.	Riboflavin	10	14.28
9.	Niacin	18	25.71
10.	Folic Acid	1	1.42
11.	Iron	30	42.85
12.	Calcium	12	17.14

Table 2: Distribution of subjects responding correctly the inclusion and exclusion of food items in different diseases (n=70)

S.No	Diseases	Food Items	f	%
1.	Typhoid	Milk (I)	60	85.57
		Egg (I)	50	71.42
		Whole grains (E)	53	75.71
		Refined cook cereals (E)	14	20.00
2.	Tuberculosis	Milk (I)	64	91.42
		Dal (I)	64	91.42
		Fatty meal (E)	49	70.00
		Tea or coffee (E)	49	70.00
3.	Diarrhoea	Strained fruit juice (I)	63	90.00
		Skimmed milk powder (E)	51	72.85
		Nuts and oil seeds (E)	57	81.42
		Whole grains (E)	47	67.14
4.	Constipation	Raw vegetable and fruits (I)	63	63
		Whole grains (I)	60	60
		Refined flour (E)	61	61
		Tea or coffee (E)	52	52
5.	Peptic ulcer	Milk & cream (I)	60	60
		Bread (I)	53	53
		Whole grains (E)	46	46
		Pickle & Chutney (E)	46	46
6.	Diabetes	Refined Sugar (E)	15	15
		Complex CHO (I)	23	23
		Fruits & Vegetable (I)	12	12
		Squashes & canned foods ((E)	20	20

survey carried out by Levine *et al.*, (1993) who reported that physicians considered nutrition to be

important in clinical setting and had favorable attitudes towards using practical.

Survey studies revealed that doctors are hesitant to provide nutritional information to patients due to low levels of confidence resulting from lack of education and knowledge in this field (National health promotion and disease prevention objective, 2000). Survey of doctors in Turkey revealed that the average rate of correct response was 48% and more than 50% of physician had mediocre knowledge on nutrition. (Ayes ozfer ozzcelik, 2007).

On the whole, it can be important that most of the doctors had satisfactory knowledge regarding role of diet in the management of diseases. As there are no dieticians appointed in government hospitals it becomes the duty of the doctor for the counseling of diet and it is very necessary that they should guide the patients in right direction, which is lacking in most of the hospitals hence, it becomes first priority to appoint at least one dietician in each hospital. These views were strengthened by most of the doctors.

CONCLUSION

The findings of the study revealed that subjects were familiar with food sources of vitamin A, C, E and knowledge on iron and folic acid sources was highly insufficient where only two doctors were able to enlist correctly the basic food groups. The concept of clear liquid diet, full fluid diet and normal diet were clear to some extent to the respondent whereas less than 10 percent of them were familiar with light and bland diet. Responses on therapeutic nutrition showed that the concepts of different types of diet and their recommendation for selected diseases were not known to most of the subjects. More than 90 per cent of the subjects correctly answered that normal diet should be modified by changing their consistency energy value and nutrient content. Theory possessed apt knowledge on the inclusion of milk and dhal in tuberculosis. Strained fruit juices can be given freely to a patient having diarrhoea was accurately reported by more than 60% of the subject. Similarly, knowledge about and exclusion of food items were satisfactory of nutrition and were of opinion that nutrition subject included in there MBBS curriculum and a dietician be appointed in every hospi-

tal. Almost all of them considered themselves as one of the person responsible for diet counseling and agreed to have adequate knowledge of therapeutic nutrition.

REFERENCES

- Anderson, L., Dibble, M.V., Turkk, P.R., Mitchell, H.S., Refnbergen, H.J. (1982). Nutrition in health and disease. J.B. Lippincott company, Philadelphia; 17-13.
- Davidson, S.S., Passmore, R., Brock, J.F. and Trushell, A.S. (1975). Human Nutrition and Dietetics, E.L.B.S; 535-545.
- Hiddink, J.G., Hantnest, G.A. J., Woerkauncees, M.J.V. and Fuieren, J. (1994). Nutrition Education for primary care physician, letter to editor. *Am. J. clin-areti*, (2); 301-302.
- Levine, B.S. Wigen, M.A., Chapman, D.S., Kerner, J.F., Bergman, R.L., and Rivlin, L.S. (1999). A national survey of attitudes and practices of primary care physician relating to nutrition. Strategies of enhancing the use of clinical nutrition in medical practice. *Am J. Clin. Nutrition*, 57; 115-9.
- Mandot and Sankhala (1996). "Nutritional knowledge of medical student". Unpublished M.Sc. thesis, Food and Nutrition Department, college of Home Science, Udaipur, RAU, Bikaner.
- Mehta, P., Nanavati, K., Phadake, S., Baxi, S., and Parikh, N. (1989). Effect of dietary counseling on knowledge gain of middle and high income group diabetics. *The Ind. J. Nutr. Dietet*, 26; 260-66.
- Robinson, C.H. and Lowler, M.R. (1982). Normal and therapeutic nutrition, 16 Fd, Macwilliam Publishing Co. Inc. New York; 12-13.
- Schapiro, D.V., kumar, N.B., Lyman, G.H. and Mcmillian, S.C. (1991). The value of current nutrition information. *Preventive medicine* (19)1; 43-35. C.F. Nutr. Ales. And Rev. 61; 415.

