

ORIGINAL ARTICLE

DIETARY SUPPLEMENTATION AMONG DOCTORS IN KELANTAN

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ABSTRACT

The aim of the study is to describe the usage of dietary supplements among doctors working in the hospitals in Kota Bharu, Kelantan. The method used was a postal questionnaire survey of the doctors, both specialists and medical officers working in these hospitals. The results showed that only 28.7% of the doctors are taking dietary supplements. Significantly more female doctors and doctors on long term medication, were taking these supplements. The dietary supplements commonly used were multivitamins and minerals (92.3%), garlic (26.9%), vitamin C (26.9%) and lecithin (15.4%). The majority of the doctors who took dietary supplements (60%) felt their health status have improved. These supplements were mostly obtained from hospital pharmacies. Doctors who purchase their own supplements spend between RM10 to RM120 per month. The main reasons given for taking these supplements were that the doctors 'felt healthier' and to 'prevent or as a supplementary treatment' for conditions like hypercholesterolaemia, hypertension, ischaemic heart disease and cancers. There were four doctors who regularly use traditional dietary supplements. Most doctors will generally advice their patients and children to take dietary supplements regularly, as they felt that it is important for health.

Key words: dietary supplementation, vitamins, doctors, Kelantan

INTRODUCTION

In recent years, there has been much controversy about the value of dietary supplements. Nutritionists have claimed that such supplements are generally unnecessary. A balanced diet will supply all the necessary nutrients and that supplements are required only for the treatment of established nutrient deficiency and for the prevention of deficiency in certain 'at risk groups of the population' (Mason, 1995, Fatimah, 1988). Manufacturers and distributors of dietary supplements strongly promote them for regular use, some even with exotic claims for vitamin therapies (Wolliscroft, 1983). There have also been reports on the health benefits of a number of these dietary supplements. However, there are also reports showing there is no extra health benefits from using these supplements. Despite this uncertainty, studies have shown that increasing number of people in the developed countries are supplementing their diets, usually with vitamin or mineral preparations (Stewart *et al*, 1985).

In Malaysia, there are very few studies that have examined the use of dietary supplements. A study among students in a Malaysian university noted that supplements were consumed by 9.7% of the men and 14.9% of the women (Mazlan, 1990). A study on prescription habits by doctors noted that multivitamins, vitamin C and vitamin B complex were among the most commonly prescribed drugs for upper respiratory tract infections, rheumatism/myalgia, headache/migraine and urinary tract infections (Martin & Zulkifli, 1995).

Doctors play an important role in influencing patients and the community about the need for dietary supplementation. However, the practices of doctors themselves on dietary supplementation have not been studied. In this paper, we report the results of our study, which was designed to elicit a full description of dietary supplementation practices and their beliefs among doctors in Kota Bharu, Kelantan..

METHODOLOGY

A simple questionnaire was sent to 170 doctors listed the the directory of the hospitals in Kota Bharu, Kelantan. The questionnaire included general demographic questions, dietary supplement practices and their attitudes towards dietary supplementaion in patients and children. Eight statements on common perceptions about dietary supplements were listed and the doctors were asked them to score from 1 to 5, according to the degree of importance of the statements.

Each questionnaire was accompanied by a letter explaining the purpose of the survey. The doctors were informed that the questionnaire was anonymous, to invite a more valid response. The doctors were asked to return the completed questionnaire in the stamped enveloped provided. Reminders were posted to all the doctors 2 weeks after later. These were targetted to doctors who have not responded to reemphasise the importance of their response for the success of the study.

RESULTS

One hundred and twenty nine doctors, comprising of 83 male and 46 female doctors, completed and returned the questionnaires. This represent a response rate of 76%. There were more males (64.3%) than females (35.7 %) responding to the survey. Seventy of the respondents were specialists and 59 were medical officers.

The demographic characteristics of the doctors, characterised by user status, are presented in Table 1. The sample was predominantly Malays (89.1%). There were 37 users of dietary supplements, which comprised 28.7% of the respondents.

There were no significant difference between users and non-users of dietary supplements in terms of race, occupational level, smoking status and marital status. However, there was significantly more female doctors taking health supplements than male doctors.

The types and usage patterns of dietary supplements is shown in Table 2. The usage patterns were classified into 'regular users' if the dietary supplements were used on a daily basis or 'sporadic users' if the usage is less than daily. Vitamins and garlic were the most frequent dietary supplements used by the doctors.

Table 1. Demographic characteristics of doctors by dietary supplement use category

Demographic characteristics	Users n= 35	Non users n= 94	Total (%) n=129	Significance
Race				
Malays	30	85	115 (89.1)	n.s
Non Malays	5	9	14 (10.9)	
Sex				
Male	13	70	83 (64.3)	p < 0.01
Female	22	24	46 (35.7)	
Occ				
Specialists	19	51	70 (54.3)	n.s
MO	16	43	59 (45.7)	
Smoking				
Yes	2	7	9 (7.0)	n.s
Ex	4	11	15 (11.6)	
No	29	76	105 (81.4)	
Marital Status				
Single	4	12	16 (12.4)	n.s
Married	30	82	112 (86.8)	
Divorced	1	0	1 (0.8)	

Chi square test, $p = 0.05$

Table 2. Types and usage patterns of dietary supplements among doctors

Rank	Supplement/s	Regular Users	Sporadic Users	Total (%)
1	MVT plus minerals	14	1	15 (17.9)
2	Vitamin Bco	12	3	15 (17.9)
3	Vitamin C	10	1	11 (13.1)
4	Garlic	7	0	7 (8.3)
5	MVT only	5	1	6 (7.1)
6	Traditional	4	1	5 (6.0)
7	Lecithin	4	0	4 (4.8)
8	Prenatal vitamins	3	0	3 (3.6)
9	Vitamin E	3	0	3 (3.6)
10	Fish oil	2	1	3 (3.6)
11	Ginseng	2	1	3 (3.6)
12	Iron/Folic acid	2	0	2 (2.4)
13	Bee Pollen	1	1	2 (2.4)
14	Others	5	0	5 (6.0)
	Total	74	10	84 (100.0)

Most of the doctors (68.6%) who took dietary supplements felt that their health status has improved. The remaining 11 doctors (31.4%) felt their health status remained the same. Most of the doctors (88.6%) obtained their dietary supplements from the hospital pharmacy or private pharmacies. The cost of the dietary supplements obtained from the private pharmacies ranged from RM 10 to RM 120 per month.

There were a number of reasons given by the doctors for taking dietary supplement. The reasons are shown in Table 3. The most frequent reason given was that they 'felt healthier'. The prevention or treatment of a medical condition and to reduce stress were other reasons given most frequently

Most of the doctors (63.6%) will advise patients to take dietary supplements if there is a specific medical condition. However, there were 18 doctors (14.0%) who chose advising their patients to take regular dietary supplements. There were

Table 3. Reasons for taking dietary supplements among Malaysian doctors

Reasons	Number	(%)
1. Feels much dietaryier	17	38.6
2. To prevent a medical condition	6	13.6
3. Treatment for a medical condition	5	11.4
4. To reduce stress	5	11.4
5. For beauty	4	9.1
6. For menstrual and hormonal problems	3	6.8
7. Pregnancy	2	4.5
8. To reduce weight	2	4.5
9. Recommended by colleagues	0	0.0
Total	44	100.0

also 33 doctors (25.6%) who would advocate children taking dietary supplements regularly while 62 doctors (48.1%) felt that it should be taken only when the child is not healthy.

The score for selected statements on beliefs about dietary supplements among the dietary supplement users and non users is shown in Table 4. There is no significant difference except that users scored higher for the statements that 'vitamins are much more important for health' and that 'people need extra vitamins if they feel tired and run down'.

DISCUSSION

With the increase in health awareness and affluence, the public is flooded by numerous dietary supplement products which are advertised regularly through the various media. These dietary supplements are not only obtainable from pharmacies, but are sold over the counters in retail shops, supermarkets and even direct selling by mail. Presently, there is no regulation to control the sale and advertising of these numerous dietary supplements. The public will be influenced by the advertisements and claims, which may be without any scientific basis or proof. Doctors will have to play an important role in giving professional advice on the need for these dietary supplements. The knowledge, attitudes and practices of dietary supplements among the doctors themselves will be an important influence in educating patients and the public. Studies on the prevalence of dietary supplementation have been done in a number of developed countries. However, these were mainly done on the general population and students. Studies done on the general population in America and Australia noted a prevalence of 23% to 53% in the US population and 37% to 53% in Australia (Subar & Block, 1990; Koplan et

Table 4. Rank of dietary beliefs about vitamins and dietary supplements among doctors

Rank	Belief statement	Users mean	Non users mean	Total mean
1	Vitamins are important for health	4.54	4.49 *	4.50
2	Eating a variety of food provides all the vitamins and minerals necessary	4.17	4.10	4.12
3	Natural vitamins and minerals are better than manufactured ones	3.97	4.03	4.02
4	Vitamin C can prevent colds	3.63	3.34	3.42
5	Vitamin supplements improve physical performance	3.37	3.05	3.21
6	Vitamins can help reduce stress	3.11	2.77	3.16
7	People need extra vitamins if they feel tired and run down	3.49	3.04 *	3.16
8	People should take supplemental vitamins or mineral to ensure proper nutrition	3.40	2.72	2.86
9	Many mental disorders are caused by vitamin deficiencies	2.63	2.79	2.74
10	Diseases, such as cancers can be caused by a lack of vitamins and minerals	2.91	2.62	2.70
11	Vitamin supplements reduce the symptoms of arthritis	2.77	2.59	2.64
12	Extra vitamins provide vigour and energy	2.83	2.51	2.60
13	Body fat can be lost by taking proper type of vitamin supplements	2.43	2.53	2.50
14	People can protect their health by exceeding the recommended dietary allowances	2.29	2.51	2.45
15	People who skip their meals can make up by taking vitamin of food supplements	2.06	2.34	2.27

Chi square, $p < 0.05$

al, 1986; Block *et al*, 1988, Worsley & Crawford, 1984). The prevalence of 28.7% among Malaysian doctors noted in this study was surprisingly high, and comparable to the prevalence reported from these developed countries. Doctors should be more aware about the value of dietary supplements and the indications for taking them. Multivitamins and minerals, which were the most common dietary supplements used by the doctors are commonly available at the hospital pharmacies for which the doctors can prescribe for themselves. Perhaps, this availability of vitamins and at negligible costs, plus the perception that it promotes health, accounts for the high prevalence of dietary supplements use among the doctors. Female doctors consume health supplementation much more than their male counterparts. This is expected, as being a female exposes to situations or conditions requiring supplementation, such as menstrual and hormonal problems, pregnancy, lactation. Other reasons such as for purposes of beauty and weight reduction is commoner among the female gender.

The most important reason for taking dietary supplements was that they 'felt healthier'. Prevention and treatment of a specific medical condition was only the second and third most common reasons. There were thus few doctors who took dietary supplements for the prevention and treatment of diseases. This is surprising as doctors should have a more scientific basis for taking health supplements rather than based on a perception of 'feeling healthier'. There should also be awareness of potential adverse effects with dietary supplements. A factor that should be assessed is the adequacy of nutrition education for doctors. Nutrition education is found to be inadequate in a number of medical schools (Winick, 1993). This is felt especially in the area of health supplements, where there is very active research presently and conflicting reports are appearing in the literature. Issues in nutrition, like the value of dietary supplements, should be adequately covered in the medical schools.

Health professionals other than medical doctors, who believe that dietary supplementation is mostly unnecessary, must do more to promote their views to the community. Pharmacists who sell dietary supplements, must be careful to avoid giving their professional authority to a product which may lack any health or therapeutic benefit or has risks associated with its use. Nutritionists will need to maintain health education programs so that consumers are able to make informed and intelligent choices about the supplements. There should also be effective legislation to enable some control over these dietary products. Dietary supplements are not classified as medicines, and are not subject to the stringent controls like clinical trials, dosage, labelling, purity criteria and levels of ingredients. Advertisements may include false claims and miracle cures which will mislead the public into purchasing these products.

CONCLUSIONS

Dietary supplements was taken by 28.7% of the Malaysian doctors surveyed. Multivitamins and minerals were the most common dietary supplements taken. Most of them took dietary supplements because they felt healthier and not for treatment or prevention of any specific medical condition. The role of the various dietary supplements in diseases prevention and treatment is an active research focus at present. There is a great deal of disagreement, even between experts in nutrition. Doctors should be aware of the current information available on these dietary supplements, so that they will be more effective in advising their patients and the public.

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