Dietary advice in clinical practice: the views of general practitioners in Europe¹⁻⁴

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ABSTRACT

Background: General practitioners (GPs) can promote good nutrition to patients and advise them about desirable dietary practices for specific conditions.

Objective: The objective was to assess GPs' knowledge and attitudes in implementing preventive and health promotion activities and to describe tools used by European GPs in advising patients about dietary practices.

Design: A postal survey was mailed to 1976 GPs from 10 GP national colleges to obtain information about beliefs and attitudes in prevention and health promotion, and an e-mail survey was sent to 15 GPs representing national colleges to obtain information about dietary guidelines.

Results: In the postal survey, 45% of GPs reported estimating body mass in clinical practice, and 60% reported advising overweight patients to lose weight. Fifty-eight percent answered that they felt minimally effective or ineffective in helping patients achieve or maintain normal weight.

In the e-mail survey, only 4 colleges out of 15 reported that they had published their own dietary tools, although 10 out of 15 answered that GPs use some nutritional/dietary recommendations in the office when seeing patients. Eleven out of 15 answered that both the nurse and the GP advise patients about dietary practices, with 4 answering that GPs were the only ones who advise patients. Only 5 delegates answered that they can refer their patients to trained nutrition specialists.

Conclusions: GPs think that obesity is not easy to handle in practice. Most GPs have dietary tools in the office and think that nurses play an important role in advising patients. *Am J Clin Nutr* 2003;77(suppl):1048S–51S.

KEY WORDS Dietary tools, obesity, general practitioners, Europe

INTRODUCTION

The European Network for Prevention and Health Promotion in Family Medicine and General Practice (EUROPREV) is a network of European national colleges of general practice/family medicine (presently representing 28 countries). It was established in 1997 and is affiliated with the European Society of General Practice/Family Medicine (World Organisation of Family Doctors—Europe), with the general aim of promoting evidence-based prevention in general practice. Two of the specific objectives are to define the role of the primary care doctor in health promotion and prevention, and to promote and encourage multicenter research and educational programs in prevention and health promotion throughout Europe. Disease prevention and health promotion are important tasks in the daily practice of all general practitioners (GPs). A recent suggested definition of general practice (1, page 4) emphasizes the role of GPs in prevention, stating that "the general practitioner engages with autonomous individuals across the fields of prevention, diagnosis, cure, care and palliation, using and integrating the sciences of biomedicine, Medical Psychology, and Medical Sociology." Two-thirds of the population visit their GP one or more times each year, and 90% visit at least once every 5 y (2). Therefore, GPs are in an excellent position to administer age- and sex-specific preventive and health promotion packages opportunistically-that is, when patients visit them for any reason. However, differences in the structure and organization of practice in European countries are associated with a wide variation in the degree of involvement of GPs in preventive activities (3). GPs also have a good potential to foster healthy behaviors. Particularly, GPs can promote the benefits of good nutrition to patients, advise them about desirable dietary practices for specific conditions, and refer them to a trained nutrition specialist for more detailed dietary counseling.

The objective of this study undertaken by EUROPREV was, first, to assess the knowledge and attitudes of European GPs in implementing preventive and health promotion activities in primary care as part of another project, particularly in advising overweight and sedentary patients, and second, to describe the tools used by GPs in advising patients about dietary practices.

SUBJECTS AND METHODS

Two surveys were carried out to achieve the objectives of the study. The first survey was carried out by mail from June to December 2000, using a prepaid addressed envelope. A pretested questionnaire was developed that included the following parts: (1) demographic and professional data (10 questions); (2) 2 clinical scenarios with a list of different preventive and health promotion activities and 2 different columns for responses—beliefs and atti-

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TABLE 1

Professional characteristics of general practitioners who participated in the EUROPREV survey (n = 1976)

Area of practice	
Urban area	1070 (54.14)
Rural area	379 (19.18)
Both	488 (24.70)
Other	39 (1.98)
Site of practice	
Primary health center	934 (47.26)
Solo practice	497 (25.16)
Hospital	50 (2.53)
Other	495 (25.05)
Center containing practice	
Public center	1100 (56.67)
Private center	567 (28.70)
Other	309 (15.64)
Postgraduate teaching activities	
Yes	952 (48.17)
No	1024 (51.83)

¹n; % in parentheses. EUROPREV, European Network for Prevention and Health Promotion in Family Medicine and General Practice.

tudes in practice (34 questions); (3) items related to barriers to implementing preventive activities (6 questions); and (4) items concerning personal health behavior (21 for GP males and 25 for GP females). The questionnaire was translated and adapted from English into the different national languages, being piloted by 10 GPs in each country. A random sample of GPs was selected from databases that listed GPs from national colleges of each country.

With an estimated true proportion of 0.5 (the most conservative estimate), the maximum acceptable difference of 0.05, and an alpha error of 0.05, the required sample size was calculated per country according to the number of GPs affiliated with each college. Assuming a minimum rate of participation of 50%, sample size was increased to compensate for anticipated loss. This was done by multiplying the sample size by the quantity 1/(1 - d), where *d* is the anticipated loss. In some countries, such as Malta, the questionnaire was sent to all the physicians, because of the reduced number of GPs listed.

The second survey was done from June to September 2001. A short questionnaire of 5 questions was sent out to 28 EUROPREV delegates by e-mail, with the objective of obtaining information about nutritional/dietary tools recommended by national colleges, about advising and using special written dietary recommendations in practice, and about referring patients to specialists.

All collected questionnaires were sent back to the coordinating and data management center at the EUROPREV secretariat, ensuring a centralized data entry and analysis by one research technician specifically employed for this project. Statistical methods were limited to the computation of means and standard deviations for continuous variables, percentages for categorical variables, and comparisons for categorical variables using chi-square at the 0.05 level of significance. All the analyses were done using the Stata program (version 5.0; Stata Corporation, College Station, TX).

RESULTS

Ten European countries participated in the postal survey (Croatia, Estonia, Georgia, Ireland, Malta, Poland, Slovakia, Slovenia, Spain, and Sweden), giving a total of 1976 GPs. Mean age was 44 y (SD 9.5, range 23–84), and 61% were female. The professional characteristics of GPs are shown in **Table 1**. The 2 clinical scenarios are illustrated in **Figure 1**. The results of the

First clinical scenario: A 52-year-old man visits you for the first time because of a trivial cough. He has not had previous checkups or tests. He has no personal or family history of any major disease, and he does not have known risk factors.

Second clinical scenario: A 57-year-old woman visits you for the first time because of a trivial dermatological problem. She has not had previous checkups or tests. She has no personal or family history of any major disease, and she does not have known risk factors.

Based on the scientific evidence and current recommendations, should this activity be done? (Circle the answer that you consider appropriate.)		Do you usually to the correspor described patien that you conside	carry out this activity (or do you refer ding specialist) in patients with the nt's characteristics? (Circle the answer er appropriate.)
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Activity	Yes = 1 No = 2 I don't know = 3	Yes = 1 No = 2	
Measure serum total cholesterol level	1 2 3	1 2	
Advise smokers to quit smoking	1 2 3	1 2	-
Advise heavy drinkers to reduce alcohol consumption	1 2 3	1 2	
Estimate BMI	1 2 3	1 2	-
Advise overweight patients to lose weight	1 2 3	1 2	
Advise sedentary patients to perform regular physical exercise	1 2 3	1 2	

FIGURE 1. Two clinical scenarios with a list of different preventive and health promotion activities and two columns for responses, one for responses about beliefs and attitudes and the other for responses about practice.

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Responses to the first and second clinical scenarios

	Should it		
	be done?	Do I do it?	
	% responding "yes"		
First clinical scenario			
Estimate BMI	62.74	46.66	
Advise overweight patients to lose weight	85.52	61.73	
Advise sedentary patients to perform	83.50	56.66	
regular physical exercise			
Advise smokers to quit smoking	96.56	70.80	
Advise heavy drinkers to reduce alcohol consumption	87.10	63.21	
Measure serum total cholesterol level	61.59	57.24	
Second clinical scenario			
Estimate BMI	63.72	41.81	
Advise overweight patients to lose weight	84.21	58.76	
Advise sedentary patients to perform regular physical exercise	80.01	53.75	
Advise smokers to quit smoking	85.88	60.07	
Advise heavy drinkers to reduce alcohol consumption	81.53	55.87	
Measure total serum cholesterol level	63.26	55.52	

questions related to the estimation of body mass index (BMI), the advice to lose weight and to obtain physical exercise, and the measurement of serum cholesterol, asking, first, if GPs believe it should be done, and, second, if GPs do it in practice are shown in **Table 2**. Fifty-six percent of GPs answered that the implementation of prevention and health promotion activities is difficult, 58% answered that they felt minimally effective or ineffective in helping patients achieve or maintain normal weight, and 53% answered that they felt minimally effective or ineffective in helping patients practice regular physical exercise.

No differences were found between obese GPs (BMI > 30 kg/m^2) and nonobese GPs in advising overweight patients to reduce weight and in their perception of effectiveness in helping patients to achieve or maintain normal weight.

Fifteen EUROPREV delegates representing the GP national colleges of Austria, Croatia, Georgia, Greece, Ireland, Malta, the Netherlands, Poland, Portugal, Russia, Slovakia, Slovenia, Spain, Switzerland, and the United Kingdom answered the e-mail questionnaire.

Four colleges recommend their own dietary or nutritional tools, although none of them were specific nutrition/dietary guidelines; instead, they were integrated into other condition guidelines such as hypertension, diabetes, and dyslipidemia. Nevertheless, 10 delegates out of 15 answered that GPs use some nutritional/dietary recommendations in the office when seeing patients, and when asked who does this, 4 answered the GPs themselves, and 11 answered both the nurse and the GP. Ten delegates out of 15 answered that they provide their patients with special written dietary recommendations (eg, a diet that contains1500 kcal per day, or 2000 kcal per day). Only 5 delegates answered that they can refer their patients to trained nutrition specialists, with the major reason why they cannot do this being the absence of reimbursement.

DISCUSSION

European networks such as EUROPREV permit the running of specific research projects, such as the survey that we carried out of

nearly 2000 GPs from 10 European countries. However, it is difficult to compare our results with the ones obtained in other surveys because different methods were used. The results of the 2 clinical scenarios show that GPs believe they should calculate BMI in $\approx 60\%$ of patients, but in practice they do it in only 45% of patients. Asked about advising overweight patients to lose weight, GPs believe this activity should be done in $\approx 85\%$ of patients, but again, this percentage falls in practice to $\approx 60\%$ of patients. This also happens with the other 2 activities advised (increasing physical exercise and quitting smoking), and it is not so clear with the measurement of total cholesterol, perhaps reflecting the fact that GPs would rather order tests than give verbal advice.

Other studies that evaluated preventive services in routine general practice have shown similar results to ours, and when primary care physicians were asked if weight was checked, 42% answered that they did this activity in practice (4). These results illustrate that some GPs may think that measuring weight, height, and BMI is a waste of time, because overweight and obese patients may be the worst group of patients on whom to test the success of dietary advice. Also, resources in primary care are limited, and if a GP or a nurse spends 5 min of a 10-min consultation on dietary advice, this will result in 5 min less to spend on the rest of the consultation.

We observed that more than half of the GPs were skeptical about helping patients achieve or maintain normal weight. Other surveys have shown similar results, with, for instance, in Canada (5) 48% of primary care physicians believing that dietary change has little effect and more than half stating that interventions for obesity have limited effect (after adequate training and support). In the United Kingdom, another study (6) showed that 50% of GPs felt potentially effective (after adequate training and support) in helping patients avoid excess calories, although only 20% felt currently effective.

Our network of GPs' colleges also has the possibility to obtain and share useful information from national colleges of GPs enrolled in EUROPREV and compare not only organizational health services but also guides and tools used for prevention and health promotion in clinical practice. Although we studied European GPs, the results do not represent all countries of Europe, and therefore we would welcome information from additional national colleges.

It is clear from our results that most of the national colleges do not have their own dietary/nutritional tools; however, they usually use recommendations developed by other institutions and provide the patients with specially written information. This fact is important because previous studies have shown that, in ≈16% of presenting episodes of illness, nutritional guidelines must be considered as an essential part of treatment (7). Also, our results indicate that nurses play an important role in advising patients about desirable dietary practices. However, when GPs and nurses do not have the time, knowledge, or skills to advise their patients, it is not easy to refer them to a professional qualified in nutrition for more detailed dietary counseling because referral to dietitians is usually not covered by medical insurance. Surveys such as this are in large part based on self-reporting by GPs and reflect what GPs think they do or should do. More objective evidence (eg, chart audits) is needed to see what GPs actually do; for this reason, it is crucial that GPs systematically record most relevant pre-* ventive and health promotion activities.

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