

## **CHAPTER V**

### **SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS**

#### **SUMMARY OF RESULTS**

Nearly all physicians reported that they feel diet plays a central role in the management and prevention of diet-related chronic diseases. Most physicians believe that diet is more important in the management than in the prevention of diet-related chronic diseases. Since a certain amount of bias existed in the wording of the survey questions concerning these attitudes, these results should be accepted with reservation.

Physicians and Food Stamp Nutrition Education Program (FSNEP) clients agreed that physicians provide most of the nutrition counseling during office visits, while nurses also provide a substantial portion of nutrition counseling. Registered dietitians (RDs) and nurse practitioners appear to provide minimal to moderate amounts of nutrition information during office visits. Physicians consistently reported higher amounts of nutrition counseling than was reported by FSNEP clients.

Most physicians stated that they provide nutrition counseling on a regular basis to chronic disease patients, whereas most FSNEP clients reported that they had received inadequate amounts of nutrition information from their primary-care physician. A majority of physicians reported that they feel prepared to administer dietary counseling and those who felt prepared were more likely to provide such counseling. In contrast, FSNEP clients did not appear to feel strongly that their primary-care physicians provide adequate or enough nutrition information. Thus, there is a discrepancy in the amount and adequacy of nutrition information or counseling that physicians think they are providing and that which low-income FSNEP clients feel they are receiving.

The FSNEP clients generally reported that they follow their physician's nutrition advice and that they understand and perceive the advice to be fairly good. However, most of the clients

want more nutrition information and dietary guidance. Many of the physicians did not feel that a patient's socioeconomic situation should influence the content of dietary advice. Furthermore, it appears that many are not aware of their patients' socioeconomic situations.

Most physicians reported making a moderate to low number of referrals to RDs and very few referrals to community nutrition programs. A much lower portion of FSNEP clients indicated that they had been referred to an outside nutrition education source over the previous five years. Registered dietitians were reported by both groups to be the most prevalent source to which physicians make referrals. However, physicians reported a much higher rate of referrals to RDs than was reported by FSNEP clients. A substantial number of physicians also reported referring patients to home health services and/or private organizations, such as Weight Watchers.

Health departments were the only significant free source of nutrition education to which FSNEP clients reported being referred. Free community nutrition programs, such as Cooperative Extension, were reported to be utilized by only a small portion of physicians. The most important attributes that might encourage physician referrals of low-income patients to community nutrition education programs are that they are free, are easily accessible to patients, have a referral process that is not time consuming, and they provide follow-up reports to the physician's office.

One factor chosen by over half of physicians that dissuades them from referring their patients (of all income levels) to nutrition education services was that services are expensive and/or are not covered by insurance. Other dissuading factors are a perception by physicians that few or no sources of nutrition education are available in their area and that patient compliance would be low. Some physicians were concerned about the cost of referral sources when referring low-income patients. Nearly half of physicians indicated that a patient's socioeconomic situation is an important factor in deciding whether or not they refer to a RD.

## **CONCLUSIONS**

In conclusion, free community nutrition education programs, such as FSNEP, have several characteristics that would appear appealing to primary-care physicians, particularly family practitioners and internists, and may encourage physician referrals to these programs.

However, physicians are widely unaware of such nutrition education services and a great deal of effort and resources would be required to adequately inform physicians of these programs.

Due to the overall low tendency of physicians to view nutrition counseling and referrals to outside sources as an important part of their management of older, chronic disease patients, it does not appear that a formal collaboration between primary-care physicians and FSNEP would be plausible.

The establishment of a referral system in which primary-care physicians could refer their older, low-income patients to FSNEP to receive nutrition information tailored to patients' socioeconomic situations should be given further consideration. However, the number of referrals made by physicians may not be substantial since they reported that they do not make a large number of referrals to nutrition education sources outside of their office. Physicians tend to feel that they provide a significant amount of dietary counseling in the management and prevention of diet-related chronic diseases and conditions. Furthermore, most physicians believe that they are adequately prepared to provide dietary counseling to their patients.

On the other hand, the need for additional dietary guidance of older, low-income patients is clearly indicated by the results of this study. Many FSNEP clients reported that they do not receive adequate dietary counseling from their primary-care physician. One reason for this is that physicians are not tailoring their advice to meet patients' needs in view of the patients' socioeconomic constraints. This, in turn, leads to a lack of implementation of the advice.

FSNEP could provide patients with needed general nutrition information as well as educate them on the correct use of food dollars, proper food preparation techniques, and other issues not emphasized by physicians or RDs to a significant extent. Furthermore, the nutrition

education activities in FSNEP can be designed to help each individual select and prepare low cost foods meeting the requirements of their chronic disease or condition.

Thus, primary-care physician referrals of older, low-income patients to FSNEP would improve the nutrition health of these individuals and would assist in the management of chronic diseases and conditions among this group. In order to overcome the lack of consideration of patients' socioeconomic situations, physicians need to be provided with information about the potential value of community nutrition education programs to their low-income patients. This information should emphasize that FSNEP is free and that the nutrition education is provided either in the client's home or in community groups in order to make the program accessible to all individuals. FSNEP's ability to tailor information specifically to low-income individuals should be emphasized. Also, physicians could be provided with a toll-free phone number, which is currently in operation in Virginia, as a means of referring patients to FSNEP in order to impress on them that the referral process is quick and requires little effort. Physicians should be given the opportunity to request that follow-up reports be sent to their office concerning the patient's progress in FSNEP. Before wide implementation is attempted, a referral system needs to be pilot-tested for effectiveness among a select number of primary-care physicians.

It is unknown how many primary-care physicians would be willing to refer their patients to FSNEP, including those with or without chronic diseases and conditions. If only a small number of physicians made referrals to FSNEP, a significant number of individuals would benefit from the additional nutrition information they would receive. This alone is justification for soliciting referrals of older, low-income patients from primary-care physicians to FSNEP.

### **RECOMMENDATIONS FOR FUTURE RESEARCH**

In order to improve validity of survey results in future studies involving older, low-income subjects, one of the researchers should be present during some of the interviews to assess

whether or not interviewer bias exists. The Program Assistants in this study received only two to three hours of training, and thus may not have been prepared to perform the interviews in an entirely unbiased manner. Before being interviewed, older subjects should be screened for mental illnesses, such as dementia, that may limit their ability to respond accurately to questions.

There is a need to assess the statewide portion of individuals enrolled in the Virginia FSNEP who suffer from chronic diseases and conditions. At the present time, this information is unknown. Without this data, it is impossible to accurately determine the cost effectiveness of further training the FSNEP Program Assistants to manage chronic diseases and conditions through dietary means.

In future studies, individuals not enrolled in FSNEP should be surveyed to avoid any bias that involvement in the program may have had on subjects' attitudes. Also, Free Clinics represent a possible referral source. The persons responsible for determining referrals within these organizations should be surveyed to gauge the plausibility of establishing a referral network between Free Clinics and FSNEP.

Since physicians from metropolitan areas only composed 27% of the physician study sample, more physicians from metropolitan areas need to be surveyed. This will allow more broad generalizations about the primary-care physician population to be made in regard to physicians' nutrition attitudes and practices.