III CONDUCT A COMMUNITY ASSESSMENT

Conducting an assessment of the community's perceived nutrition needs, health and nutrition status, and resources is the best and easiest way to start the process of integrating nutrition services into the community health plan. The assessment process is also a good introduction to key players and stakeholders in the community and to those who have developed or are developing a community health plan. If an agency or organization is revising or updating its health plan, community assessment is still essential in developing effective health interventions.

Perhaps obvious, the first step in the assessment process is to define the “community.” Generally characteristics such as demographics, age, paying customers, gender, etc. will define the community. The definition will depend on the agency or organization providing the intervention. For example, a managed care organization may define the community as "its members," while a county health department may define its community as "all residents living in a state defined area," and a local hunger advocacy organization may consider only "children age 12 years and younger" as its community.

The size of the community will affect the type of assessment done. For example, in a citywide assessment to identify people whose eating habits put them at risk of heart disease, program planners cannot interview all the city's residents. They may, however, randomly select a subset of citizens for screening and interviewing that might include diet interviews, questions about current services, and laboratory tests. From this sample, program planners could estimate the overall percentage of residents who are at risk and identify what health interventions the community wants. With smaller-sized target communities, such as a population of clinic clients, it may be possible to screen and interview all individuals. Time, funding, and personnel restraints can also limit the number of people surveyed and the amount of data collected in an assessment.

In conducting the community assessment, it is rarely possible to do all that is recommended in the three areas — perceived needs, health and nutrition status, and community resources. However, more information from all the areas improves the effectiveness of the intervention.

PERCEIVED NEEDS

A good first step in identifying program priorities for the nutrition intervention is to conduct a systematic survey of people in the community, asking them what major health and nutrition problems cause them concern. For example, if a mail and telephone survey of citizens, health professionals, teachers, and others identifies poor maternal nutrition as a major problem, this could become a focus of the nutrition intervention. However, it is important to recognize that community perceptions may not always reflect the needs as indicated by health and nutrition data. Therefore, research on perceived needs must be augmented and evaluated against information gathered by objective sources, such as patient screenings and surveys of death and disability records. If community perceptions do not reflect health and nutrition data, program planners may need to address the community's concerns first.

Attitudes about nutrition-related health problems in the community will affect the ease with which a program can be implemented. For example, if there is already widespread acknowledgment in the community that obesity has negative health consequences, and many individuals would like to reduce their body weight, then the probability of successful intervention is great. In other cases, the community may not perceive an objectively determined problem as serious. In such cases, program priorities may clash with those of the community, making it difficult to implement a program to address the health and nutrition data-based priorities. Awareness campaigns and open processes of negotiation are effective ways of narrowing the gaps between divergent priorities. If a health committee with community membership exists in your organization, work with it to determine priorities. Also, consider creating a nutrition subcommittee to work on future issues.[1,2]

The following methods may be used by the nutritionist to identify which issues the community believes are important:

- study mass media coverage of issues such as hunger and homelessness, major health problems, food availability and prices, food safety, and "fad" weight management programs;

- talk with community members in supermarkets, restaurants, worksite cafeterias, schools, health clinics, food stamp offices, congregate meal sites, places of worship, and spas;
- organize focus groups in the community to obtain structured responses to questions about health and nutrition concerns and demands for nutrition services;
- survey health and human service agency clients to determine their satisfaction with available nutrition services and solicit suggestions for improvement or expansion; and
- conduct structured interviews with clergy, school principals and teachers, "movers and shakers" in business and industry, and planners, administrators, and professionals in the health agency and in other agencies, institutions, and private practices.

RESOURCES FOR COMMUNITY NUTRITIONAL ASSESSMENT

Excellent resources are available to help with community nutritional assessment. See the “Nutrition Program Development” section under “Assessment” in Appendix D for a list of resources.

HEALTH AND NUTRITION STATUS

Planning for a health intervention requires knowing the nature and extent of common health and nutrition problems in the target population. Demographic, health, and nutrition data can reveal the health status of a community. Some of this data will already be collected, analyzed, and available for most communities. Types of health data include low-birth-weight rate, infant mortality rate, and leading causes of death and disability. Examples of nutrition-related data that help determine the health status of a community include dietary intake of pregnant women, number of physical education classes offered each week, prevalence of overweight, percentage of women breastfeeding, percentage of calories from fat in the diet, and food purchasing patterns.

Nutrition data is often overlooked in community health assessments, but for many communities, demographic and health data are available from local or state health departments or centers where community health services are being provided. Check with supervisors or colleagues to find this information. Dietary, nutrition status, and health data can also be extrapolated from national data. And, as a last resort, practitioners can collect the data themselves using the data collection tools in the community health plan models in Appendix C.

Gather Data on the Community's Demographic Profile

Demographic characteristics of a community include age, literacy, gender, income, ethnic group, education, and employment. This census data is available through a local, county, regional, or state government agency. Often, the vital records section, or a similarly named division within the health department, will have this information or will be able to refer you to the agency that does. Much of this data is also available through the Internet.

For both large and small populations, demographic data can be used to rapidly derive preliminary estimates of the frequency and distribution of hunger, malnutrition, and diet-related diseases, based on known relationships between demographic parameters and risk. For example, if children in single-parent, low-income families are more likely to suffer malnutrition than the general population, a demographic assessment can indicate areas of low income where the probability of malnutrition is high.

Gather Data on the Health Status of the Community

This information is also readily available through the vital records section, or similarly named section, of the health department at the local or state level. Types of health status data include infant mortality rate, hospital discharge data, and causes of death and disability. The health professional developing a community-based nutrition program should identify and use data that indicates poor nutritional status, such as heart disease death and disability rates, rather than motor vehicle accident death rates.

To identify those in greatest need of nutrition intervention, look at the health status data of a subpopulation, such as a specific ethnic group or a low-income population, within the larger community. A disparity between a target population and the whole population will help focus the intervention.

Along with health data, it is useful — and at times required — to collect data on how much these diseases collectively cost clients and public service agencies. From this information, the health practitioner developing the intervention can estimate savings that could be realized through nutrition interventions. Information on cost effectiveness and cost benefit can be found in the chapter on implementing the intervention.

Gather Data on the Nutritional Status of the Community

Nutrition data is rarely included in the health data or health assessment of a community. The nutrition or health practitioner developing a community-based nutrition program may have to locate, analyze, and interpret data themselves. However, this data is obviously of great value and necessity.

Categories of nutrition data include:

- nutritional status and nutrition-related health measurements (e.g. anemia, serum cholesterol level, overweight, lead screening results, and hypertension);
- food and nutrient composition of diets (e.g. intake of total fat, saturated fat, calories, vitamins, and minerals);
- knowledge, attitudes, and behavior assessments of people (e.g. awareness of benefits of breastfeeding, physical activity patterns, breastfeeding rates, perceptions of food and nutrition issues);
- food composition and nutrition data bases (e.g. calorie and nutrient composition for foods, including new and brand name foods); and
- food supply determinations (e.g. amount of food available, nutrient availability, emergency food resources, food disappearance data, and household food expenditures).[3]

This nutrition data may be available at the local level, but is more likely to be available through your state health department. The nutrition director in the state health department may have access to this information. Contact the Association of State and Territorial Public Health Nutrition Directors (ASTPHND) in Washington, DC to refer you to a specific state nutrition director.

Nutrition data can also be extrapolated from national nutrition data and there are many databases providing data on the nutritional status of Americans. Among these, are databases administered by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services. See the section "Sources for National Food and Nutrition Data" in Appendix D for a brief description of several nutrition databases.

A minimum basic screening includes:

- ◆ a few basic questions about dietary practices,
- ◆ two anthropometric measurements — height and weight,
- ◆ a few biochemical tests — hemoglobin/hematocrit and serum cholesterol, and
- ◆ a review of physical and dental examination findings.

Conduct Screening for Nutritional Status of Individuals

Screening is a cost-effective way to identify individuals or groups in need of more detailed assessment. Screening can be done by using relatively simple or inexpensive indicators of nutrition or health condition. For example, overweight or obesity is a simple first-cut indicator that a patient is at risk of developing adult-onset diabetes. Likewise, low pre-pregnancy body weight can indicate that a woman is at risk for delivering a low-birth-weight baby. Certain screening may not be practical for studying large populations. For example, when dealing with an entire city, reviewing the entire citizenry's medical records for body weight and other simple information would not be feasible.

The following types of data are useful in screening for nutritional status:

- information on families, including socioeconomic data and any community factors that might relate to the health and nutrition problem;
- dietary assessment to determine quality and quantity of individual diets, including information on dietary intake, food acceptance, meal patterns, methods of food preparation and preservation, and utilization of food assistance programs;
- medical history and current state of health, and data related to medications used, low birth weight, and hypertension;
- physical examination and evaluation for signs and symptoms of nutritional status, including dental evaluations where available, height, weight, and other anthropometric measurements;
- laboratory studies such as hemoglobin and/or hematocrit, casual glucose, lead, cholesterol, and urinalysis; and
- special biochemical analysis such as serum or plasma albumin.[4]

COMMUNITY RESOURCES

A nutrition program will be maximally effective if it takes advantage of all the available community assets and human, financial, and logistical resources. Therefore, a thorough assessment of resources should be conducted. This information will be useful in developing the nutrition plan, as described in Chapter V.

Contacts made at this stage with health professionals, residents, community leaders, and others will be of benefit throughout the development, implementation, and evaluation of the program. Some ideas on the type of information collected in this step of the assessment are listed below.

Identify Other Organizations Delivering Nutrition Interventions

What other agencies, media, employers, coalitions, food companies, schools, or entrepreneurs are responding to the public's demand for:

- nutrition information, education, and diet counseling?
- food and financial assistance for food?
- guidance with food budgeting, meal planning, and food preparation?
- access to an adequate, wholesome, safe, and nutritious food supply?

Characterize the Quality of Other Nutrition interventions

- How well do they respond to the needs of the population for whom they are designed? Were program participants included in the design?
- How much of the community is served by these programs? Are community members utilizing the programs?
- Are the services based on sound research and currently accepted ethical practices, or is additional technical guidance or regulation necessary?

Identify Human, Financial, and Logistical Resources and Community Strengths

- What nutrition professionals are available in your agency?

- What expertise do these professionals have? Are they involved in primary, secondary, or tertiary prevention efforts?
- What other health professionals are available?
- What sources of funding are available, such as private industry; local or state foundations; local, state, or federal programs such as Title V, The Older Americans Act, and The Preventive Health Block Grant? See Appendix B for more information on federal food and nutrition program funding.
- What community leaders might become involved, including those associated with places of worship, schools, local clubs, coalitions, advocacy groups, and local government?

Identify Policies and Practices Affecting the Nutrition and Health of the Community

- What policies or practices in the schools affect nutrition and health?
- What about the local news media? Do they promote "unhealthy" recipes and meal plans? Does the area dietetic association have a regular newspaper column or a phone service to answer consumer questions?
- What kinds of meals are served at local clubs and organizations, including League of Women Voters, Lions, Rotary, Kiwanis, Extension Homemakers, Business and Professional Women, etc.?

Determine the Capacity of the Health Organization

- What is the organizational capacity of the health care agency designing the plan? Does the agency have the administrative capacity to assist in carrying out the nutrition intervention?
- How can its capacity be cost-effectively expanded by building coalitions with other public and private health and human service agencies, the media, business and industry, and/or contracts with other agencies, businesses or individual entrepreneurs?

Nutrition Support Within the Health Agency

- Are nutrition services valued within the health agency?

- Where is the public health nutritionist placed on the agency's organizational chart?
- Does the agency perceive the nutritionist to be a senior program manager or a clinic diet counselor?
- Is there a plan and budget for nutrition services?
- Is the nutrition plan integrated into the community health agency plan?

Generally, it is not possible to do an ideal, thorough community assessment. The success of the intervention, however, is strongly linked to the quality of the assessment. At a minimum, some information from each category — perceived needs, health and nutrition status, and available resources — should be collected.

References

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