Problems With Eating and Nutrition: Geriatric Self-Learning Module

The Geriatric Resource Nurse Model is used at the University of Virginia to improve the competency of staff in caring for older adults. Eight self-learning educational modules were developed to address common concerns in hospitalized elders. The Problems With Eating and Nutrition: Geriatric Self-Learning Module is published here, along with a post test. This is the second in a four-part publication of self-learning modules.

The Geriatric Resource Nurses at the University of Virginia developed the Self-Learning Modules in Geriatric Care (Lee, Fletcher, Westley, & Fankhauser, 2004). The SPPICEES pneumonic addresses eight distinct modules, each targeting a commonly encountered health concern of older adults across health care settings. These include:

- S: Sleep
- P: Problems with eating and nutrition
- P: Pain
- I: Immobility
- C: Confusion
- E: Elimination
- E: Elder abuse
- S: Skin

The modules were designed using a case study approach in order to encourage the learner to gain new knowledge as well as apply this knowledge. Each module includes two case studies, one applicable to the care of an older adult in the inpatient setting and the other applicable to an older adult in the outpatient setting. Each module will take approximately 20 to 30 minutes to complete.

The completion of these self-study modules alone does not ensure the staff member is age-specific competent; this is determined through the observation and demonstration of behaviors while working directly with older adults. However, these modules will enhance the staff member’s knowledge as a foundational step in developing competent behaviors.

Purpose

The purpose of this module is to provide age-specific educational information related to nutritional problems in older adults for the inpatient and outpatient staff.

Target Audience

This self-study module is for use by health care professionals caring for older adult inpatients and outpatients.

Directions

1. Read and review the learning objectives.
2. Read both case studies and the self-study module information.
3. Answer the post-test questions.

Objectives
At the conclusion of this module the professional patient care staff will be able to:
• Discuss reasons why the risk of poor nutrition is increased in older persons.
• Identify cues that indicate a need for more in-depth assessment.
• Discuss interventions that help address nutrition problems.

Overview
The food pyramid continues to be a good basic guide for a healthy diet as people age. Recent changes to the recommended daily allowances address those over age 50 for the first time. Nutrient needs tend to increase as people age, although their caloric needs generally do not increase because of diminished activity and decreased metabolism. If extra weight is a health concern, the older adult needs to eat nutritionally dense food to get more nutrients in fewer calories than a younger counterpart; this is often a challenge. However, the opposite problem of weight loss and protein calorie malnutrition is extremely common in elders, particularly among the sick and hospitalized. Inadequate fluid intake is also very prevalent. Because older adults have a diminished sense of thirst, they often drink less but still usually need approximately 2,000 cc of fluid a day.

Multiple problems and changes occur as people age which make obtaining, eating, enjoying, and metabolizing adequate amounts of food a challenge. By some estimates as many as 25% of Americans age 60 and older are malnourished. Nutrition is extremely important to good health, and even subclinical deficiencies can impact body function (Johnson, 1997). Risk factors for poor nutrition in the older adult are typically cumulative and interrelated. A great variety of diverse issues can influence an elder’s ability to be nutritionally healthy. A partial list includes the following:
• Normal aging changes in smell and taste.
• Ill-fitting dentures and other oral or dental problems.
• The impact of disease which may change nutritional needs or interfere with adequate intake.
• Depression, confusion, and memory loss.
• The effects of multiple medications.
• Substance abuse (an estimated 10% of elderly abuse alcohol).
• Diminished function which limits ability to shop, cook, and prepare meals.
• Social isolation.

As the number of risk factors increases, the prevalence and degree of impaired nutrition also increase.

Unintentional weight loss of over 10 pounds in 6 months should be investigated. It is often a sign of illness. Many older persons suffer from inadequate food intake and protein energy malnutrition, not only in the community but also in acute and long-term care settings. In these settings, food intake is often inadequate for a variety of reasons. Appetites are poor because of illness, anxiety, medication side effects, lack of physical activity, and/or depression. Tests and studies may require NPO status that is sometimes continued longer than necessary. Patients may be unable to obtain food they find appealing. Negative comments about hospital food are common. The variety, preparation, and presentation of hospital food have definitely improved but it is still a challenge for patients to get food they want, prepared as they would like, at the time they feel like eating, and at the correct temperature. For patients in questionable or poor nutritional health, not eating well has significant implications for energy, wound healing, cognition, and their sense of well-being.

When illness results in significant weight loss, evaluation by a registered dietitian is very important to ensure appropriate interventions and adequate nutritional intake. Speech and occupational therapy evaluation and treatment may also be needed to enable patients to feed themselves and eat safely.

Getting adequate nutrition is also a challenge for many older people who live on their own in the community. After getting help to address their risk factors and obtaining medical attention as appropriate, older patients and families may use a variety of resources to assist with nutritional needs. Examples of these resources are Area Agencies on Aging, Meals on Wheels, nutrition sites, home health agencies, and paid advocacy services. In addition to these formal resources, informal networks of family, friends, neighbors, and church groups often provide assistance that allows older people to remain in their homes.

Outpatient Case Study
You work in an outpatient clinic and a receptionist asks your advice about the following situation.

“My 81-year-old father lives alone, about 300 miles away with no other immediate family members close by. He has been caring for himself without a problem but recently when I visited, his clothing looked baggy and there was little food in his refrigerator. He ate well when I was there, but I am concerned about what is going on when I am not. Do you have any suggestions about what I should do?”

What suggestions would you give her? Compare to following discussion.
• Begin by acknowledging her concern. What are some questions you can ask to help her determine the cause?

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What suggestions would you give her? Compare to following discussion.
• Begin by acknowledging her concern. What are some questions you can ask to help her determine the cause?
• Suggest that she talk directly with him and express her concerns. Find out if he identifies problems. Does he feel that he has lost weight? It will be easier to address issues if she can work with him as a partner. A good place to start would be to ask if there have been changes in his function and his ability to obtain, prepare, or eat his food. What medications is he taking? Anything new? Have changes occurred in his social network?
• Ask him to keep a record of what he eats for a few days.
• Does she know his usual weight? Can she weigh him or get him to weigh himself?
• When has he last seen his health care provider? A visit to his primary care provider would be appropriate if he has lost 10 pounds or more in the past 6 months. She might go with him or call and alert the office about her concern prior to his visit.
• Caring for an older adult relative at a distance is a challenge. It is never too early to set up a network of formal (community agencies and service providers) and informal support (friends, neighbors, family members) to help with his care. If she feels she needs additional help, suggest she also call the local caregiver helpline.
• The Area Agency on Aging (AAA) in her father’s area, she can call Eldercare Locator (1-800-677-1161).

Inpatient Case Study
Ms. T.E. is an 88-year-old white female admitted to your unit from the ED. She was admitted because of increased confusion and lethargy. She lives with her 86-year-old sister and was brought into the ED by a concerned niece. T.E. has no known health problems and does not take any medications. Your findings on admission assessment: frail older woman who is oriented to self only. IV fluid is infusing in her left forearm. She is weak and needs maximum assistance to move from the stretcher to the bed. Her hair is thin and sparse, and mucus membranes are pale and dry. Vital signs T 97, P 122, R 22, BP 86/60, and weight 102 lbs (50.9 kg).

Additional significant physical findings are
• moderate kyphosis, 
• diminished size and tone of the muscles of her extremities, 
• poor skin turgor, and 
• 1+ to 2+ edema bilaterally in lower extremities.

Significant laboratory data include the following:
• red blood cells (RBC) 3.1 (3.6 - 5 x 10^6)
• hemoglobin 10.5 (12-16 g/dL)
• hematocrit 35% (36% - 48%)
• sodium 148 (136 - 145 mEq/l)
• blood urea nitrogen (BUN) 50 (8-23 mg/dL)
• creatinine 1.0 (0.6 - 1.1 mg/dL)
• albumin 3.1 (3.5 - 4.8 g/dL)

What data give cues that nutrition and dehydration are significant areas of concern? List these and then compare to the discussion of the case study.

Vital signs. Her elevated pulse rate and her decreased BP likely are related to dehydration. At 102 pounds, she is thin. Given her dehydration, you would expect a weight loss. However, it is important also to consider her nutritional status. She may have been thin all her life, but it is important to get information about her usual weight and any significant recent weight loss. Significant weight loss is considered 5% or more of body weight in 1 month, 10% or more of body weight in 6 months, and/or involuntary weight loss of 10 pounds in 6 months.

Laboratory findings
• RBC and hemoglobin are low. Anemia is present and the cause needs to be determined. The numbers actually look better than they are because of dehydration.
• Increased hematocrit, sodium, and BUN indicate dehydration.
• Decreased albumin indicates moderate malnutrition. Albumin is sensitive to changes in nutritional status but has a long half-life (17-21 days) and therefore is not a useful measure of cur-
1. Which of the following are risk factors for poor nutrition in older people?
   a. Oral and dental problems
   b. Social isolation
   c. Depression
   d. Multiple medications
   e. All of the above

2. Which of the following statements is generally accurate about the fluid intake in older people?
   a. There is no reason for concern; drink as much as they feel like taking.
   b. Because of poor kidney function, they need to drink 500 cc a day less than younger adults.
   c. They should make sure to drink about 2,000 cc a day, even if not thirsty.
   d. Drinking adequate fluid is only a concern if they are constipated.

3. What are some of the reasons for a poor appetite in a hospitalized patient?
   a. Illness
   b. Being kept NPO
   c. Anxiety
   d. Not being able to get food that appeals
   e. All of the above

4. What are possible community resources that may be helpful to older people who need help getting and preparing food?
   a. Area Agency of Aging
   b. Informal support from friends and neighbors
   c. Meals on Wheels and similar programs
   d. Home health aides
   e. All of the above

5. Involuntary weight loss of 10 pounds in 6 months should be a trigger for what?
   a. A celebration; almost everyone is a little overweight
   b. New dentures
   c. Evaluation by the individual’s primary care provider
   d. Speech and swallowing evaluation

Table 1.
Laboratory Values Related to Nutritional Status

<table>
<thead>
<tr>
<th>Lab Test</th>
<th>Normal Value</th>
<th>Moderate Deficit</th>
<th>Severe Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albumin</td>
<td>3.5-4.8 g/dl</td>
<td>2.8-3.2 g/dl</td>
<td>&lt; 2.8 g/dl</td>
</tr>
<tr>
<td>Transferrin</td>
<td>250-425 mg/dl</td>
<td>170-250 mg/dl</td>
<td>&lt; 160 mg/dl</td>
</tr>
<tr>
<td>Pre-Albumin</td>
<td>19-38 mg/dl</td>
<td>10-15 mg/dl</td>
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</tr>
</tbody>
</table>


Problems with Eating and Nutrition Post-Test

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Post-Test Answers
1. e
2. c
3. e
4. e
5. c

References

Resources
Nutrition

General Aging