Promoting Education for the Cardioprotective Diabetic Diet: Overcoming Barriers to Learning in the Acute Care Setting

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April 23, 2008

The Cardioprotective Diabetic Diet

- Low sodium
- Consistent carbohydrate
- Low cholesterol/fat
- Fluid moderation (monitor fluid retention)
- Limit alcoholic and caffeinated beverages
- Increased fruits and vegetables

Taking A.I.M.

- *Basic steps to education*:
- (1) **Assess the learner and learning needs**.
- (2) **Identify barriers to learning**.
- (3) **Motivate the patient to make changes** (address the patient's immediate needs before the patient attempts to change).
- The educator must determine the patient's extent of general health knowledge, the accuracy and validity of that knowledge, what domain of learning is involved (cognitive – understanding, psychomotor – physical skill, or affective – attitude and emotion), readiness to learn, and self-efficacy.

Common Barriers to Assessment & Education

- Pain, awareness (sleep, medications)
- Family visitors
- Competing for time with patient (other health care providers, tests, other procedures)
- Phone calls
- Patient attitude, preconceptions

Case A: S.

- 80 year old Caucasian female c/o SOB & weakness
- 5'6" & 155#
- PMH: CHF, CRI, DM, pulmonary HTN, cholecystectomy
- Nutrition Consult: >10 lbs weight loss
- Regular diet with <25% intake
- Diet PTA:
  - Patient depressed and too weak to prepare food. Intake decreased after discharge home from rehabilitation facility 1 week prior.
  - Patient reports cravings for food but quickly loses interest when presented with food.
  - Daughter reports patient as a "picky eater."

- *Nutrition Prescription*: Diabetic Cardioprotective diet. 1700 kilocalories and 70 grams of protein.

- Diagnosis
  - Involuntary weight loss related to inability or decreased inability to prepare food as evidenced by severe weight loss.
  - Inadequate intake related to feeding habits as evidenced by consumption of less than 50% of meals or less than estimated needs.

- Intervention
  - Meals and snacks.
  - Microwave entrees or daughter plate foods for patient. County social services go to home and assess patient needs for assistance, cleaning, cooking. Assessment by occupational therapy.

- Monitoring & Evaluation:
  - Increased total energy intake. Patient will consume >50% of meals and snacks to meet >50% of assessed needs.

Issues 

- Time/availability (multiple tests) & Family (distraction)
  - “Identify key resources and supports for self-management (RSSM)” theory.
  - Methods to overcome a distracted interview include returning at a later time, approaching the nurse or other team members (collaborate with team members), and utilizing the chart for laboratory data and other nutritional history.

Case B: S.D.

- 36 year old overweight (BMI = 27.1) Caucasian male with DKA
- 6'0" & 200#
- PMH: DKA, HTN
- Clear liquid diet with 100% intake
- Hospitalist and Diabetes educator report that patient lacks funds for strips to test, medications, or for outpatient diabetes education. Patient instinctively can count carbohydrates in his head.

- *Nutrition Prescription*: 2000 kilocalories and 90 grams of protein with consistent carbohydrates or diabetic diet.

- Diagnosis: Limited adherence related to self-monitoring deficit as evidenced by lack of finances to purchase test strips.

- Intervention: Referral to social worker for financial assistance options and to free clinic.

- Monitoring & Evaluation: Decrease hemoglobin A1C from 9.93% to less than 7%. Food/Glucose library.

Issues

- Early discharge → inadequate time for all team members to address his needs
- Lack of finances to purchase medications and test strips to self-manage diabetes
  - **"Identify key resources and supports for self-management** (RSSM)" theory.
  - Collaborate with the hospitalist and the diabetes educator for information regarding the patient.
  - Referral to a local free clinic and a social worker

Case C: J.

- 50 year old obese (BMI = 36.6) black male with acute onset of chest pain
- 5'9" & 248#
- PMH: LBBB, CHF, pneumonia, cocaine and alcohol use
- Cardiac diet with 100% intake
- Diet PTA:
  - Patient was in pain, was partially endentulous, and had minimal hearing in right ear.
  - Patient reports minimal protein intake along with avoidance of sodas, coffee, and acidic foods such as tomatoes. *"I used to eat chicken, but I don't eat meat much anymore."* Patient enjoys ice cream.

- *Nutrition Prescription*: 1900 kilocalories and 90-112 grams of protein

- Diagnosis: Inadequate protein intake related to chewing difficulty as evidenced by intake <35 grams protein daily.

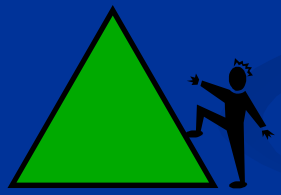
- Intervention: Encourage increased variety of protein sources.

- Monitoring & Evaluation: Monitor patient adequacy of protein intake. Patient states at least 3 sources of protein he will consume regularly.

- ***NOTE***: *F/U 4 days later to re-assess due to pain and some confusion during the first interview, revealing patient consumes adequate sources of protein to meet needs. Planned intervention no longer appropriate.*

Issues

- Physical or environmental distractions (Pain)
  - **Maslow's Hierarchy of Needs**: Patient's basic physiological needs required attention before addressing higher needs.
  - One method to overcome assessment barrier is to draw on family or caretakers for information.



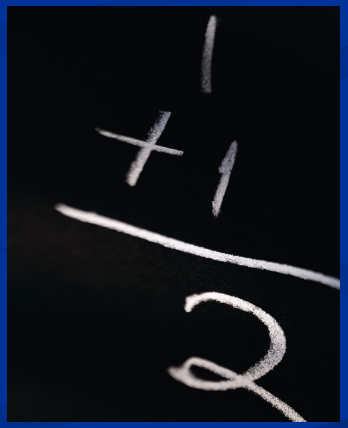
- Patient attitude
  - Consider "stage of change" with **Transtheoretical Model of Behavior Change**
  - Admitted daily consumption of ice cream after I mentioned some sweets I enjoy and asked the patient if he enjoyed any of them.

Case D: S.D.

- 63 year old obese (BMI = 34.2) Caucasian male c/o visual disturbance and polyuria and polydipsia x3 weeks
- 5’9” & 232#
- Nutrition Consult: Physician referral for new onset diabetes mellitus.
- PMH: HTN, CAD s/p CABG, 1-2 beers weekly
- Clear liquid diet with <50% intake
- PTA: Only eats evening meal, but drinks 8 cups of coffee and multiple sodas throughout the day.

- *Nutrition Prescription*: 1950 kilocalories and 92-116 grams of protein with consistent carbohydrates. 16 carbohydrates daily.

- Diagnosis: Inconsistent carbohydrate intake related to new diagnosis diabetes mellitus (related to knowledge deficit) as evidenced by diet history of 1 meal daily.



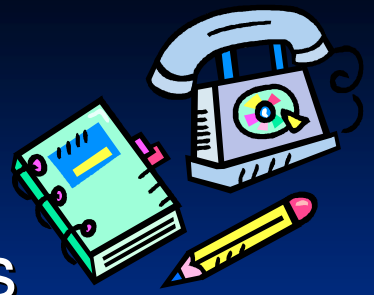
- Intervention: Initial/Brief education.

- Monitoring & Evaluation: Patient stated meal plan for a day with 3-4 carbohydrates per meal.

Issues

- Patient attitude
  - **"OARS" technique**: Affirming healthier choices patient already makes or discussing small changes to make a healthier choice.
  - 8 cups of coffee daily; patient felt guilty about not drinking any water during the day. I encouraged him to begin by replacing 3 cups of coffee with water.
  - New dx DM → stress and anger
  - Survival education materials must maintain **simplicity** even for high literacy patients to address other barriers to learning

Recommendations



- Increase utilization of telephone follow-ups
- Include interdisciplinary teaching flow sheets
- Schedule follow-up outpatient appointments
- Provide simplified access to multiple resources
- Address financial, physical, or environmental barriers to behavior change
- Utilize creative problem solving skills
- Apply a variety of learning models or education techniques to address all learners

INCREASE CONTACT WITH DIETITIAN!

Questions?