Best Practices in Health Education and Nutrition for Diverse Older Patients with Diabetes

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Applying Best Practices to Diverse Older Adults
February 9, 2012 – *WEBINAR SERIES*

"Best Practices in Health Education and Nutrition for Diverse Older Patients With Diabetes"

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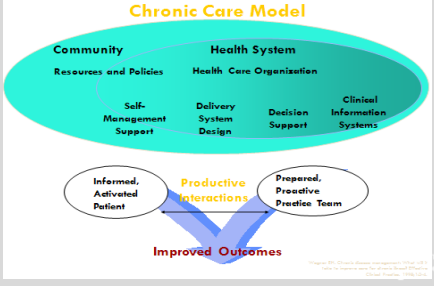
http://www.improvingchroniccare.org/



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Health Education for Ethnogeriatric Patients with Diabetes: Practical Approaches

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Learning Objectives

- Understand the prevalence of and special risks for ethnogeriatric patients with diabetes.
- Understand the role of Certified Diabetes Educators in treatment of ethnogeriatric patients with diabetes.
- Apply culturally specific resources and strategies for treatment of ethnogeriatric patients with diabetes.

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Diabetes in the Elderly

- Age 65 years or older
  - 10.9 million, or 26.9% of all people in this age group have diabetes
- By 2030 the number of older Americans will have more than doubled to 70 million (1 in every 5 Americans)*
- Care of older adults with diabetes is complicated by their clinical and functional heterogenity
- Diabetes represents a heavy medical, human and socioeconomic burden for elderly people

*Center for Disease Control and Prevention. Healthy Aging for Older Adults.

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Race and ethnic differences in prevalence of diagnosed diabetes: More common in ethnic elders

After adjusting for population age differences, 2007-2009 national survey data for people diagnosed with diabetes, aged 20 years or older include the following prevalence by race/ethnicity:

- 12.6% of non-Hispanic blacks
- 11.8% of Hispanics
- 8.4% of Asian Americans
- 7.1% of non-Hispanic whites

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Complexities of DM Management in the Elderly

- Higher rates of:
  - Premature death
  - Functional disability
  - Coexisting illnesses (hypertension, CAD, stroke and arthritis) than those without diabetes
- Physical changes:
  - Elevated renal glucose threshold
  - **Dexterity, visual and auditory impairment**
- Social and Psychological circumstances
  - Support system
  - Financial status
  - **Language barriers**
  - Depression

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Elderly: At Higher Risk for Geriatric Syndromes

- Polypharmacy
- Depression
- Cognitive impairment
- Urinary incontinence
- Injurious falls
- Persistent pain

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Challenges

- Identification of appropriate treatment goals in elderly with diabetes
- Recognizing symptoms of Hyperglycemia or Hypoglycemia
- Achieving adequate Self Blood Glucose Monitoring (SBGM)
- Understanding diabetes treatment options
- Meeting individual needs
- Preventing / Delaying complications of diabetes in the elderly

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Recommendations for HBA 1c in the Elderly

- **ADA**: Older adults who are **functional, cognitively intact, and have significant life expectancy** should receive care using goals developed for younger patients **(<7%)**
- Glycemic **goals for older adults not meeting the above criteria may be relaxed** based on the overall health status of the individual (risk of acute hyperglycemic complications should be avoided in all patients)
- **AGS**: **Relatively healthy** older adults with good functional status should be treated to a goal of **HbA 1c <7%**
- For **frail older adults, persons with life expectancy of less than 5 years**, and others in whom the risks of intensive glycemic control appear to outweigh the benefits, a **less stringent target such as < 8%** is appropriate

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Causes of **Uncontrolled Hyperglycemia** in the Elderly

- Food and hydration
- Physical activity
- Oral medication
- Insulin dosing
- Storage
- Injection technique

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Signs and Symptoms of **Hyperglycemia** in the Frail Elderly

- Polyphagia (frequently hungry)
- Polydipsia (frequently thirsty)
- Blurred vision
- New or increased confusion
- Lethargy
- Weight loss
- Worsening incontinence
- Fruity breath odor

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Signs and Symptoms of **Hypoglycemia** in the Frail Elderly

- Altered behavior and mental function
- Altered level of consciousness (drowsiness, lethargy)
- Confusion or disorientation
- Falls
- Generalized weakness
- Hallucinations
- Hunger
- Irritability
- Pallor
- Poor concentration and coordination
- Seizures
- Stroke
- Sweating

*American Medical Directors Association

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Measurable behavior change is the desired outcome of diabetes education

- Healthy eating
- Being active
- Monitoring
- Taking medication
- Problem solving
- Reducing risks
- Healthy coping

AADE7™ Self-Care Behaviors

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Healthy Eating

- Nutritional needs of the older adults change often
  - The older person's taste, smell, and appetite diminishes
  - Ability to obtain and prepare food decreases
- Obesity and unintentional weight loss have been associated with increased morbidity and mortality
- Assessment: weight status, swallowing ability, dentition, functional ability to obtain and prepare food, cooking facilities, finances, ability to self-feed, social isolation, and nutritional knowledge

Being Active

- Clinical and cognitive assessments
  - Cardiovascular status
  - Co-morbid conditions (emphysema, osteoarthritis, retinopathy)
  - Risks associated with aging (frailty)
  - Possibility of hypoglycemia
- Activity goals are set collaboratively to reflect the individual's abilities, interests, and physical barriers

Monitoring

- Essential components of self monitoring
  - Blood glucose
  - Foot checks
  - Blood pressure
  - Weight
  - Exercise frequency

Self Blood Glucose Monitoring (SBGM)

- Successful meter operation is dependent on **adequate vision** and **manual dexterity**
- Assess for glucose meter that that will meet a person's physical and mental abilities. One Touch Ultra 2 meter can be programmed in Spanish

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Speaking Meters

Back-lit Meters

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Taking Medication

- Adherence to medication regimens tend to be poor in older persons and must be assessed frequently
- Common causes of non-adherence in older adults
  - Decreased vision, hearing, and manual dexterity
  - Cognitive impairment
  - Stress and depression
  - Polypharmacy
  - Economic limitations
  - Avoidance of adverse effects (ie. hypoglycemia)

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Problem Solving

- Memory and ability to follow complex instructions change in normal aging
- If dementia is advanced, adequate diabetes self-management will require assistance from family or other caregivers
- Use appropriate Education materials (Pt's primary language, large or bold print, pictures)
- Use of Glucose logbooks may help patients remember to check blood sugars and take medications regularly
- Frequent and regular follow-up with diabetes educator

Healthy Coping

- Managing diabetes is often stressful and overwhelming
- In older persons this stress may be magnified by lessened psychosocial support due to losses of spouse or peers, financial independence, and mobility
- Addressing psychosocial issues is important for healthy coping

Other Factors- Site of Care

- The patient's ability to perform activities of daily living, functional status, cognitive level, and personal preferences will influence the education given
- Older persons with diabetes in acute care settings should be referred for diabetes education as early as possible
- Survival skills should be assessed and taught as needed
- Older persons residing in long term care or rehabilitation facilities have unique needs
  - Timing of meals and medications
  - Food choices
  - Education for resident, family members, staff a necessity

Other Factors- Health Literacy

- Patients with limited resources, low literacy levels, or learning disabilities are sometimes labeled as 'noncompliant'
- Minority patients have consistently reported more communication problems during health care visits compared to whites
- Signs of low health literacy: 'cannot read material in clinic because they forgot their glasses, frequently missed appts, or errors in medication admisnitration
- Clear communication is key in providing culturally competent care

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Meeting individual needs: A Patient Case

- 82 Y Mexican male patient with limited English proficiency, is widowed, lives with son in rural farm-working community who assists with ADL's. Son with low health literacy, 5th grade education. Pt with vision impairment. Diet is high in carbohydrates (potatoes, bread, tortilla, rice, beans). Limited fixed income.
- New-onset DM, requires basal/bolus insulin regimen
- Blood sugars highly variable 40-400's
- Self-monitoring of blood glucose is essential in this patient

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Prevalence of Type 2 DM among Mexican Americans

- Prevalence of DM is twice as high among Mexican Americans than among non-Latino whites in the U.S.
- Mexican Americans tend to have more severe diabetes
- Experience disease onset at earlier ages
- Mexican Americans comprise the largest and fastest growing U.S. Latino subgroup
- Thus the need for effective, culturally appropriate interventions to support diabetes management among Mexican Americans is necessary

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Common Diabetes-related Beliefs and Practices among Mexican Americans

- "Diabetes can be caused by an intense fright or trauma" (susto)
- "Insulin can cause blindness"
- Use of alternative therapies (folk remedies)
- Consulting of folk healer (*curanderos*)
- Shared disease management; strong Mexican cultural value for familismo

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Incorporating effective diabetes management interventions for Mexican Americans

- Include elements to enhance cultural appropriateness
  - Use of Spanish
  - Discussions of ethnic Latino foods
  - Inclusion of Latino music
  - Use of Latino staff

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Interventions for Individualized treatment

- Address language barrier - Utilize medical interpreters
- Advocate for simplified regimens
- Teach survival skills (SMBG, signs and symptoms of hypo/hyperglycemia, timing of insulin and food)
- Address visual impairment- insulin pen vs. syringe/vial, consider talking meter. Insurance Prior-auth/medical justification often required.
- Financial barriers- refer to social worker, resources such as in-home support services, meals on wheels, home health RN
- Cultural tailoring- diet preferences, etc.
- Close follow-up with DM team (CDE, RN, physician), PCP
- Arrange for adequate time for education appropriate to the patient's needs (Diabetes self management education/training

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Resources for patients with diabetes

- http://www.diabetes.org/living-with-diabetes/
- Support groups
- Community resources
- Find a Certified Diabetes Educator (American Association of Diabetes Educators) http://www.diabeteseducator.org/DiabetesEducation/Find.html

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Best Practices in Nutrition Counseling and Treatment for Ethnogeriatric Patients with Diabetes

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Learning Objectives

For Dietary Treatment of Ethnogeriatric Patients With Diabetes:

- Understand the importance of cultural values.
- Apply culturally specific nutrition resources and strategies.
- Understand the role of Registered Dietitians and Certified Diabetes Educators.

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Build on Cultural Values

Treatment includes:

- Not only standard nutrition food choice and frequency evaluation.
- But also attention to traditional cultural values, especially among those elders who are less acculturated.

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Mexican American Ethnogeriatric Example

- *Personalismo*:
  - Use personal rather than impersonal relations.
- *Respeto*:
  - Show respect to elders, who are traditionally valued in Mexican society.
- *Familismo:*
  - Emphasize the value of, and reliance on the family.
  - This can be a strong motivation to encourage elders to accept dietary changes to help treat their diabetes.

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Familismo and Diet Therapy

- Emphasize healthier diets for the entire family.
- Use family support for dietary changes.
- Involve family member who does grocery shopping and cooking.
- Focus on preferred cultural foods.

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Culturally Specific Nutrition Education Resource Modules

- Cultural perspective
- Traditional food habits
- Acculturation issues
- Contemporary food habits
- Counseling considerations

Kittler, P. , Sucher, K ., & Nelms, M. (2011). *Food and culture.* (6h ed). Belmont, CA: Wadsworth.

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Mexican American Ethnogeriatric Example

Traditional Foods:

Staples include corn and beans.

- ***Fruits****:* bananas, guava, mango, papaya, pineapple
- ***Vegetables****:* avocados, squash, cactus, i.e.,"*nopales,*" chile peppers, tomatoes, onions, and salsas

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- ***Grains****:* corn and corn products (*tortillas* and *masa*), long grain rice (usually prepared with vegetables), European-style breads and rolls, and pan dulce (Mexican sweet bread)
- ***Dairy products:*** cheese and "*crema*," (Mexican cream used for topping)
- ***Protein sources:*** beans, meats (prepared with chile peppers and vegetables), *carne asada* (grilled beef), *chorizo* (spicy sausage), eggs

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Acculturation to Mainstream American Diets:

- Consider: Length of residence in the U.S., Age, Education Level, Income level, and Ability to speak English.
- Ethnogeriatric vs. younger generations experience.
- With acculturation, consumption of many traditional dishes decreases while, many new foods are added.
- Mexican American examples: flour tortillas, plain cooked rice, white bread, ice cream, cookies, salad dressing, mayonnaise, margarine, sodas.
- Higher fat, sugar , and refined carbohydrates are postulated as risk factors for a number of diseases, including type 2 diabetes.

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Strategies for Dietary Changes

***Make Healthy Food Choices*:**

- Low in total fat, especially saturated fat, cholesterol, and trans fats.
- Increase intake of complex carbohydrates, fresh vegetables and fruits, and low fat sources of protein, (for example, beans, lean meats, fish, and poultry)
- **Focus on a return to healthy traditional foods.**

***Control Food Portions*:**

- Teach serving sizes and portion control (use food replicas)
- For ethnic elders, can use the ethnospecific food guide "my plate" to discuss adequate servings and recommended choices from each food group

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http://www.choosemyplate.gov/

United States Department of Agriculture

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Mexico

Modify Cultural Recipes
Some Mexican American Strategies

- Use corn tortillas instead of flour.
- Consume boiled beans instead of refried.
- Add more vegetables to mixed dishes.
- Use low fat dairy products.
- Use fruits (raw or baked) for dessert.
- Prepare poultry, fish, and lean meats grilled, instead of fried.
- Use low fat cooking methods like baking or microwaving (tortilla chips, softening tortillas, vegetables).
- Use small amounts of vegetable oil for frying instead of lard.

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African American traditional diet, "soul food"

- Many fried and high fat foods are preferred:
  - Fried chicken, red meats
  - Use of pork fat for flavor
  - Macaroni and cheese
- Dietary interventions would include:
  - Substitution of low fat proteins sources
    - poultry, fish, and beans
  - Low fat cooking methods
    - Baking, grilling, boiling, stewing
    - When frying, use small amount of vegetable oil

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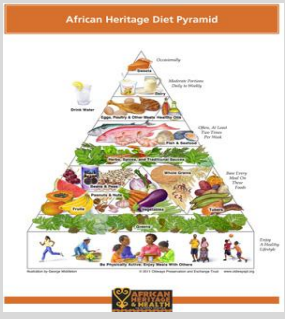

- http://www.oldwayspt.org/AHH-pyramid

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Asian American traditional diet

- Refined white rice is often eaten with every meal.
- Dietary interventions would include:
  - Portion control for rice
  - Increased vegetables to reduce amount of rice

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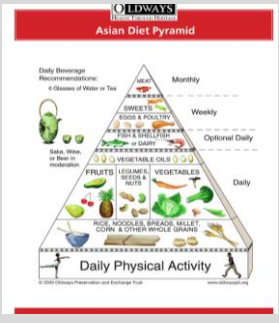

- http://www.oldwayspt.org/asian-diet-pyramid

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Individualize Treatment

- Consult a Registered Dietitian (RD) or Certified Diabetic Educator (CDE).
- Individual goals are needed:
  - To maintain blood glucose levels in normal range
  - To reduce risk for complications of diabetes
    - heart disease, kidney disease,
    - blindness, amputation

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Issues to Address Include:

- Obesity/weight loss
- Co-morbidity considerations
- Percentage of daily carbohydrate, fat, and protein intake
- Timing of meals and snacks
- Carbohydrate counting
- Food adjustments based on glucometer readings
- Exercise recommendations
- Medications

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Resources

- El Plato del Bien Comer (Mexican Myplate Food Guide). www.fns.org.mx/index.php?IdContenido=46
- Ethnic/Cultural Food Guides. USDA. Retrieved January 19, 2012. http://fnic.nal.usda.gov/nal_display/index.php?info_center=4&tax_level=3&tax_subject=256&topic_id=1348&level3_id=5732&printer = 1
- Internet resources to locate Food Replicas: www.eNasco.com
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- Internet resources to locate Registered Dietitians or Certified Diabetes Educators: www.eatright.org www.diabeteseducator.org

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