AADE American Association of Diabetes Educators

AADE Position Statement:

Special Considerations in the Management and Education of Older Persons with Diabetes

Rebecca Schafer, MS, RD, CDE; Nancy Letassy, PharmD, CDE; David Randal, PsyD, LP, CDE; Catherine Dorey, RN, MSN, CNS, CDE; Linda Haas, PHC, RN, CDE; Phyllis Barrier, MS, RD, CDE

Introduction

The population of the United States is aging. By 2030, the number of older Americans will have more than doubled to 70 million, or one in every five Americans. [1] Age-related factors may interfere with self-management of diabetes as most people over 70 years of age will have some deterioration in mental and physical functioning, even if their ability to learn may not be impaired.[2, 3] For older persons, the American Geriatrics Society standard of care is individualized treatment with a focus on quality of life. This position statement identifies the unique needs of older adults who are likely to have increased need for diabetes self-management education/training (DSME/T) in the future.

Role of the Diabetes Educator

The diabetes educator helps older persons with diabetes set appropriate goals, learn skills and acquire knowledge about their disease. Educators assess and address age-related changes and other factors that may interfere with good diabetes management.[4] The diabetes education plan incorporates regular assessments to evaluate the patient's functional, cognitive and psychosocial status changes over time. Educators enhance self-management skills that are appropriate to the patient's diabetes-related symptoms and concomitant conditions and therapies.[3,5] Within this context, diabetes educators also educate care providers, homecare aides and institution staff about the AADE7™ Self Care Behaviors and their relevance to older persons with diabetes.

AADE Maintains the Following Positions

- People of all ages with diabetes need to have an accurate diagnosis and a diabetes treatment plan tailored to their specific situation that includes DSME/T.
- DSME/T for older persons with diabetes should consider the individual's life expectancy, functional status, and the presence of cognitive changes as well as the individual's preferred learning style, language, literacy and health literacy.
- DSME/T for older persons needs to be individualized, simplified, and conducted in a step-wise manner.
- Older adults, family members, and care givers are encouraged to obtain DSME/T that is appropriate to the patients' needs.
- Measurable behavior change is the desired outcome of diabetes education for people of all ages. The AADE7™ Self-Care Behaviors provides a framework for developing DSME/T which is relevant for older adults.

- Research geared towards the needs of older persons should be a focus as the population ages and the numbers of persons with diabetes increases.

Background/Definitions

Older adults can be defined as, "younger old" (ages 65-75), "older-old" (ages 75-85), and "oldest old" (ages 85+).[6] For simplicity, this position statement classifies those aged 65 or older as older adults. In older populations, there is great variability in health status, living situations, literacy, psychosocial status, cognitive abilities, functional abilities, social support, and diabetes treatment and goals.[7] The risk of cognitive and physical impairment increases with age; these changes may interfere with diabetes management if not assessed and addressed.[8] The AADE7™ Self-Care Behaviors[5] need to be considered when developing DSME/T treatment plans and goals to address clinical, educational, and psychosocial needs.

Healthy Eating

Nutritional needs of the older adults change often as the older person's taste, smell, and appetite diminishes, and ability to obtain and prepare food decreases.[9] The DSME/T assessment of nutrition needs should make note of such changes.[10] Obesity and unintentional weight loss have been associated with increased morbidity and mortality.[9] In addition, glucose control is a prime concern for older persons.[11,12] Educators collaborate with the patient to set nutrition-related goals that avoid both hyper and hypoglycemia, while helping the patient maintain a reasonable weight.[13,14] Initial and ongoing assessment by the diabetes educator and/or dietitian addresses weight status and includes barriers such as swallowing ability, dentition, functional ability to obtain and prepare food, cooking facilities and equipment, finances, ability to self-feed, social isolation, and nutrition knowledge.

Being Active

Regular physical activity can help maintain physical and emotional health in the older person with diabetes by lowering glucose levels supporting cardiovascular health, improving strength, balance and flexibility, and enhancing a sense of well-being and positive mood.[15,16] Educators conduct a clinical and cognitive assessment that addresses cardiovascular status, co-morbid conditions (emphysema, osteoarthritis, retinopathy), risks associated with aging (i.e., frailty) and the possibility of hypoglycemia, prior to designing a physical activity program.[17,18] Activity goals are appropriate for the older person with diabetes, as they are set collaboratively to reflect the individual's abilities, interests, and physical barriers.[19]

Monitoring

Self-monitoring of blood glucose, foot checks, blood pressure, weight, and exercise frequency are essential components of self-management.[20,21] Since successful meter operation is dependent on adequate vision and manual dexterity, diabetes educators conduct careful assessments of vision, manual dexterity and meter technique in older persons. The educator makes recommendations for a glucose meter that will meet the person's physical and mental abilities and provides instruction for caregivers when needed.

Taking Medication

Many older persons with diabetes require diabetes medication, and frequently have need of combinations of medications.[22] Adherence to medication regimens tends to be poor in older persons and must be assessed frequently.[22-24] The common causes of non-adherence in older adults are related to decreased vision, hearing, and manual dexterity, cognitive impairment, stress

and depression, polypharmacy, economic limitations, and avoidance of adverse effects.[25,26] Failure to take medications as prescribed may lead to poor outcomes.[16,27] The use of combination agents (e.g., fast-acting insulin secretagogues taken only at mealtime) can improve adherence and reduce

the risk of hypoglycemia, but may also increase the risk of adverse effects and cost.[29] When medication non-adherence is found, the educator devises an education plan, advocates for simplified regimens, assesses medication-related adverse effects, recommends screening for depression, determines financial barriers, and refers to other health providers as appropriate.[28]

Problem Solving

Evidence suggests that people with diabetes are more likely to develop dementia.[16] Memory and ability to follow complex instructions change in normal aging.[15] Older persons may fatigue easily and experience difficulty with complex thinking. In people with mild impairment, creative approaches by the educator can enhance effective diabetes education. If dementia is advanced, adequate diabetes self-management will require assistance from family or other caregivers familiar with diabetes care.

Reducing Risks

Aging is accompanied by an increasing incidence of diabetes-related complications, such as cardiovascular disease.[30] Long-term complications of neuropathy and cardiovascular disease make lower extremity amputations more likely. The acute complication of hyperglycemia increases the risk of falls and hyperglycemic-hyperosmolar syndrome; hypoglycemia can also lead to falls and subsequent injury. Self-management is important to prevent or delay microvascular complications.[22,31] Diabetes educators help patients set goals that reduce the risks for both acute and chronic complications and educate older persons and caregivers about screening tests and preventive interventions.[32] Educators teach preventive interventions such as foot care for older persons who have difficulty examining their feet. They also make referrals for podiatry or orthotics, smoking cessation, retinopathy screening, and immunizations when needed.

Healthy Coping

Addressing psychosocial issues is important for 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.[9] Some people experience changes in cognitive function that may be due to depression.[6] Untreated psychiatric disorders can lead to increased isolation, a misdiagnosis of dementia, or other difficulties which may contribute to deficits in diabetes self-care. Awareness of these issues is crucial for effective DSME/T. Referral for treatment may be needed.

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. The initial diabetes education assessment includes short-term learning needs regarding diabetes self-management with appropriate teaching provided if knowledge is found to be deficient.[33] 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[33] and referral for outpatient DSME/T should be made, based on urgency of need.

Older persons residing in long term care or rehabilitation facilities have unique needs.[34] DSME/T for these persons needs to be appropriate to the person's condition and limited during

times of confusion. Diabetes self-management strategies, while limited in some institutionalized individuals, should focus on preventing further deterioration from preventable causes, such as falls resulting from hypoglycemia or exacerbation of existing coronary artery disease. The movement to make long term care facilities more home-like can impact the resident's timing of meals, medications, and food choices, necessitating education for both the resident, family members, and staff.

Recommendations

- The full spectrum of treatment strategies should be utilized with older persons just as they are for younger persons, while considering the person's preferences and quality of life issues.
- Adequate time for education, considering the unique needs of the older person with diabetes, should be made available and reimbursed by third party payers.
- Long term care facilities with a more home-like environment are desirable, allowing flexibility with meal times, liberalized diets, and improved quality of life. Education for the resident, staff, and family members is needed as more facilities move towards this type of setting.
- Screening for common geriatric conditions that have a significant impact on health status of older persons with diabetes (polypharmacy, depression, cognitive impairment, urinary incontinence, injurious falls, and persistent pain) should be conducted regularly by the health care provider and diabetes educator.

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Catherine Dorey, RN MSN CNS CDE
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