

Special Considerations for the Education and Management of Older Adults With Diabetes

**American Association of
Diabetes Educators**

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statement of the American
Association of Diabetes
Educators (AADE). AADE is
dedicated to advancing the
role of the diabetes
educator and improving the
quality of diabetes
education and care.**

Effective management of diabetes requires that all persons receive an accurate diagnosis followed by subsequent education and treatment to control their diabetes. In the older adult population, special factors must be considered for managing blood glucose levels, preventing potential acute and chronic complications, and providing self-management education.

DIAGNOSIS

Undiagnosed and untreated diabetes is more common in older adults than in other age groups. Being diagnosed with diabetes can be a traumatic experience and should be handled tactfully by the healthcare professional without trivializing the diagnosis. It is important to emphasize that this disease is serious but treatable and can be controlled. Blood glucose elevations in older adults can be attributed to factors such as coexisting illnesses, decreased physical activity, increased adipose tissue, drug interactions, and viral infections. Hyperglycemia due to acute illness must always be ruled out to assure an accurate diagnosis of diabetes. A transient medical condition such as surgery or the use of certain medications (eg, steroids, antihypertensives, or cardiac drugs) also can cause a temporary increase in plasma glucose. Hospitalization poses an opportunity for diagnosis.

PLANNING TREATMENT

Assessment and individually planned educational programs are essential for appropriate diabetes self-management. The older adult with diabetes may have specific medical,

pharmaceutical, visual, psychosocial, cultural, religious, nutritional, financial, and transportation issues that should be considered when planning treatment and educational programs. As a person grows older, the number of medical problems tends to increase and physical mobility may be affected. An older adult may be taking more medications and thus be more likely to experience drug interactions. Every effort should be made to minimize the complexity of the medication regimen.

EDUCATIONAL METHODS

The capacity to learn and integrate new information remains intact throughout the life cycle, although age-related changes can affect the processing of information. An assessment of hearing and mental status is indicated if learning or self-care difficulties arise. Results of these assessments should be taken into account when selecting appropriate teaching methods and materials and behavioral strategies. A slow-paced, stepwise method of teaching using memory aids is an effective approach for older adults. Family members and others involved in the care of an older adult with diabetes may require education as well. The diabetes educator must maintain a positive attitude for the learning sessions to be successful.

NUTRITION

As age-related changes in taste and olfaction occur, food preferences may change and food consumption may decrease. Nutritional needs may also be altered due to factors such as a slower metabolic rate and decreased activity. The potential for absorption deficiency may at times dictate the need for blood chemistry

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studies. Supplemental vitamins and minerals may be necessary. A thorough assessment of the individual's food preferences, cooking facilities and capabilities, as well as dentition and swallowing ability should be conducted, and appropriate nutritional guidance should be provided. Due to a decreased thirst mechanism, adequate fluid intake also should be encouraged. All meal plans should be individualized and developed with the patient, include collaborative short- and long-term goals, and give consideration to these nutritional factors.

ACTIVITY

Regular physical activity can enhance nutritional modifications to achieve weight loss and improve lipoprotein profiles. Exercise usually lowers blood glucose levels in the nonketotic state, thus contributing to better glucose control. In addition, exercise often increases cardiovascular tone and can contribute to a sense of well-being. Exercise can, however, increase the risk of hypoglycemia when a person is taking certain oral antidiabetic medications. A medical evaluation is needed prior to initiating an exercise program. Once this evaluation is completed, older adults should be given guidance in selecting activities that are appropriate for their health status.

MEDICATIONS

Some older adults with diabetes can be treated with effective meal planning alone, but many more require diet plus an oral agent and/or insulin therapy. If oral agents are prescribed, potential interactions with other drugs should be anticipated and avoided. Long-acting sulfonylureas may pose a problem for older patients due to the cumulative effects

of these drugs. Medications that increase the risk for hypoglycemia should be identified and avoided. Oral agents should be chosen carefully in the presence of renal, liver, or cardiac insufficiency. Drug therapy should be initiated with the lowest therapeutic doses. Those who require insulin may need assistance with preparation and self-administration techniques due to possible visual difficulties and decreased fine motor skills. With the introduction of additional oral agents and/or combination therapy, the regimen may become more complicated and confusing. The goal of therapy is to achieve optimal glycemic control and eliminate diabetes-related symptoms using a practical treatment regimen within the context of concomitant conditions and their therapies.

HYPOGLYCEMIA

Older adults are at higher risk for medication-related hypoglycemia due to renal changes, slowed counterregulation, inadequate hydration, use of multiple medications, erratic food intake, and slowed intestinal absorption. They often exhibit hypoglycemic symptoms related to neuroglycopenia (eg, confusion) or lack of motor skills rather than the more common epinephrine responses (shakiness, sweating, weakness) exhibited in younger people. These symptoms may be mistakenly attributed to Alzheimer's disease or dementia. Each person should be taught to recognize his/her own individual signs and symptoms of hypoglycemia and be prepared to treat them. Target blood glucose values for older adults should be individually determined based on patient goals, hypoglycemic unawareness, overall health status, and self-care skills and abilities.

SELF-MONITORING

Self-monitoring of blood glucose (SMBG) should be encouraged as an essential component of treatment. However, SMBG may be problematic for some older adults due to changes in visual acuity and fine motor skills. These changes may make it difficult for the older person to get a drop of blood, place it on a small test spot, and/or read and record the numerical result. After a careful assessment of vision, manual dexterity, and the patient's personal preferences, care should be taken to recommend a glucose meter that will meet the needs and accommodate the conditions of each patient. Personal resource networks can be explored to aid the older adult with diabetes who is unable to test his/her own blood glucose.

PREVALENT COMPLICATIONS

Older adults have a higher incidence of complications from diabetes, particularly retinopathy, cataracts, and glaucoma. The incidence of these conditions increases with the age of the patient. Routine annual eye exams (dilated) are the most effective method of screening detection for vision loss.

In addition to decreased vision, peripheral neuropathy can also compromise self-detection of lower-extremity problems. Regular foot inspection by the patient and a health-care professional is advised, and use of properly fitted footwear and/or orthotics should be encouraged.

PSYCHOSOCIAL ISSUES

The psychosocial needs of older adults may be affected by distance from family, financial status, level of independence, illness or death of a spouse, depression, or the need to

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live in an extended care facility. These factors highlight the importance of developing a support system that provides encouragement, reinforcement, and technical advice. When financial and/or transportation limitations exist, the elderly person may be hesitant about purchasing necessary equipment and supplies as well as visiting the health-care provider or diabetes educator. Therefore, it is important to investigate the reimbursement coverage provided by a person's health-care plan as well as other available community health-care resources.

LONG-TERM CARE FACILITIES

A large proportion of the residents of long-term care facilities have diabetes. Standardized diabetes care and education is possible in these facilities with the help of diabetes educators, who can develop care strategies and provide current information.

RECOMMENDATIONS

The American Association of Diabetes Educators recognizes the special education and care needs of older adults with diabetes and strongly encourages all educators to individualize education and treatment based on these needs, and to facilitate and support active participation on the part of the learner.

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DEVELOPMENT OF THIS DOCUMENT

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