

POINT OF CARE INTERVENTION TO IMPROVE FOOT SELF CARE IN PATIENTS WITH TYPE 2 DIABETES

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Diabetes mellitus is the leading cause of non-traumatic lower extremity amputation. Minimizing risk factors and improving foot care could prevent fifty percent of lower extremity amputations, but many people in the United States have no health insurance and are unable to access preventive services. Hospital emergency department's serve as a source of care when no primary care provider (PCP) is available, but patients who use these services do not receive the self-management education that would teach or reinforce self-care behaviors. Patients with diabetes who do not perform foot self-care are at high risk for missing the subtle clues that would allow for early recognition of a problem that could lead to lower extremity amputation.

PURPOSE: The purpose of this study was to test the efficacy of a brief foot self-care intervention delivered to patients with Type 2 diabetes in an emergency department. The research addressed the following specific aims: 1) Compare differences in foot self-care behaviors in patients with Type 2 diabetes who receive foot risk assessment, a brief foot self-care intervention, or usual care at one month follow up. 2) Test the association between self-efficacy and foot self-care behaviors in patients with Type 2 diabetes who receive foot risk assessment, a brief foot self-care intervention, or usual care at one month follow up.

METHOD: This experimental study, used a pre-test, post-test randomized, three-group design, to compare the foot self-care behaviors of patients who received usual care to those who received a risk assessment and to those who received the risk assessment plus a brief foot self-care intervention. Participants were recruited as they presented to the ED for non-emergent care. A research assistant masked to group assignment collected follow up data at four weeks.

FINDINGS: A total of 167 participants were recruited in the emergency department and 144 completed one month follow up. Twenty-three participants were lost to follow up, primarily due to inability to contact participants for follow up using contact information provided at recruitment. Data analysis demonstrates trends towards improved foot self care scores in all groups with greater improvement in the intervention group.

DISCUSSION: This study demonstrates that brief interventions to teach components of diabetes self-care delivered at points of care along the health care continuum may offer an effective approach to improve self-care behaviors. Further study is needed. The importance of using innovative methods to deliver self-management education is underscored in a disease with sequelae that can lead to lower extremity amputation with a resultant five-year mortality rate as high as 68% post-amputation.