Reducing Disparity Thru Food Insecurity Screening in Hospitalized Stroke Patients

Purpose: This project aimed to better quantify the impact of food insecurity amongst adult stroke patients admitted to a Comprehensive Stroke Center in San Bernardino County. The clinical question for this project was: Among adult inpatients diagnosed with transient ischemic attach (TIA), acute ischemic or intracerebral hemorrhagic stroke who are at risk for food insecurity, does implementing a food insecurity assessment tool including local food resource education with follow-up patient phone calls identify food insecure stroke patients compared to current practice with no standardized assessment or education regarding food insecurity?

Background: A review of the literature found that food insecurity contributes to poor management of chronic disease with associated healthcare costs. This has led many institutions to focus on hunger and its impact on health outcomes by screening for food insecurity and providing education and resources to reduce this disparity. The setting for this project does not currently screen for food insecurity.

Methods: Through a PDSA process, an evaluative Quality Improvement project was conducted through use of a convenience sample of recruited stroke patients admitted to a step-down unit at a Level 1, Comprehensive Stroke Center to better understand the prevalence of food insecurity among admitted stroke/transient ischemic attack patients. Patient evaluations assessing their self-efficacy, perceived illness consequences, and reported nutritional habits were done with one-on-one interviews. Participating stroke patients were screened for food insecurity utilizing a validated two-item Hunger Vital Sign tool. Discharge education was provided on federal and local resources for food resources. The benefit of local government resources was evaluated by follow-up phone calls to those patients discharged home.

Results: A total of 30 patients interviewed, 18 (60%) patients screened as food insecure. This total sample included 18 (60%) diagnosed with ischemic strokes, 10 (33%) diagnosed with intracerebral hemorrhage, and 2 (7%) diagnosed with transient ischemic attack. Of this sample, the principal payer type included 4 (22%) Medicare patients. A majority of patients screened felt that food insecurity screening would improve the care that was provided 26 (87%). Twenty-four patients (80%) screened felt comfortable telling the truth, in regards to food insecurity disclosure, and 25 (83%) felt better understood with the screening.

Implications: The literature reveals that food insecurity may be more widespread than expected and screening is an important aspect of stroke recovery and may aid in reduction of stroke/TIA recurrence. A two-item food insecurity screening tool allowed for quick identification and intervention in the adult stroke inpatient population. Results indicated that food resource education was appreciated by both patients' and families. Nursing can assist with utilizing the multidisciplinary team to best support patients and provide empowering discharge education to aid in improved patient outcomes and reduce healthcare disparities. Future studies should explore the association between food insecurity and stroke, to monitor the benefits of screening and discharge education, and to correlate food insecurity with hospital stroke readmissions.

Keywords: food insecurity, ischemic stroke, hemorrhagic stroke, screening tool, health disparity

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