Post stroke depression (PSD) is one of the most frequently occurring and most debilitating complications following stroke and is most commonly defined as depression that was non-existent prior to the stroke. There is a unique correlation between stroke and depression, designating stroke along with 7 other medical conditions (cancer, metabolic disturbances, gastrointestinal, autoimmune, endocrine, pulmonary and cardiovascular diseases) that cause depressive symptoms.

Stroke survivors present unique challenges to identifying depression. Stroke-related neurological deficits including flat or monotone speech, flat affect, aphasia and subtle clues such as refusal to participate in therapies and emotional lability may hinder healthcare practitioners' identification of PSD and lead to under diagnosis and treatment of PSD.

PSD has been shown to increase hospital charges, increase hospital length of stay for acute stroke care, decrease cognitive and functional outcomes, decrease quality of life, increased risk for recurrent stroke at 1 year and increased stroke mortality. Controversy remains regarding whether or not routine screening for PSD improves outcomes.

Additionally, there is uncertainty regarding the optimal screening tool for PSD. Several depression screening tools are utilized to screen for PSD with varying success including the 21-item Hamilton Depression Rating Scale (HDRS) (sensitivity: 0.84; 95% CI, 0.75–0.90; specificity: 0.83; 95% CI, 0.72–0.90), the 20-item Center of Epidemiological Studies-Depression Scale (CES-D) (sensitivity: 0.75; 95% CI, 0.60–0.85; specificity: 0.88; 95% CI, 0.71–0.95) and the 9-item Patient Health Questionnaire (PHQ-9) (sensitivity: 0.86; 95% CI, 0.70–0.94; specificity: 0.79; 95% CI, 0.60–0.90) which is widely used however, may be better suited as screening tool to identify stroke survivors without depression rather than stroke survivors with depression.

Research has shown that screening for PSD in conjunction with collaborative care intervention including an interdisciplinary approach to patient care consisting of a structured plan of care, evidence-based treatment interventions, scheduled patient follow-ups and enhanced interdisciplinary communication results in better outcomes for this population.

Title:
Evidence-Based Screening for Post-Stroke Depression
Keywords:
Depression, Screening and Stroke

References:
Trotter, T. Denny, D. & Evanson, T. (in press). Literature review of the sensitivity and specificity of the PHQ-9 when Screening Stroke Patients for Post-Stroke Depression. *Journal of Neuroscience Nursing*

**Abstract Summary:**
Post stroke depression (PSD), which has been negatively correlated with increased stroke mortality and risk for recurrent stroke, affects nearly 30% of all stroke survivors and is often underdiagnosed and under treated. Evidence-based screening for PSD can lead to more accurate and early diagnosis and treatment for PSD.

**Content Outline:**

**Purpose:**
The purpose of this presentation is to highlight the phenomenon of post-stroke depression (PSD) for nurses practicing at all levels of nursing and in diverse healthcare settings and provide insight into evidence-based screening protocols for early detection and treatment of PSD.

**LEARNING OBJECTIVES**

Discuss the incidence, prevalence and natural history of post stroke depression (PSD) and PSD has been shown to increase hospital charges, increase hospital length of stay for acute stroke care, decrease cognitive and functional outcomes, decrease quality of life, increased risk for recurrent stroke at 1 year and increased stroke mortality.

Discuss negative correlation of PSD negative stroke outcomes
Outline evidence-based screening protocols for PSD to support earlier recognition of and treatment of PSD.

Controversy remains regarding whether or not routine screening for PSD improves outcomes. Additionally, there is uncertainty regarding the optimal screening tool for PSD. Several depression screening tools are utilized to screen for PSD with varying success including the 21-item Hamilton Depression Rating Scale (HDRS) (sensitivity: 0.84; 95% CI, 0.75–0.90; specificity: 0.83; 95% CI, 0.72–0.90), the 20-item Center of Epidemiological Studies-Depression Scale (CES-D) (sensitivity: 0.75; 95% CI, 0.60–0.85; specificity: 0.88; 95% CI, 0.71–0.95) and the 9-item Patient Health Questionnaire (PHQ-9) (sensitivity: 0.86; 95% CI, 0.70–0.94; specificity: 0.79; 95% CI, 0.60–0.90) which is widely used however, may be better suited as screening tool to identify stroke survivors without depression rather than stroke survivors with depression.

Research has shown that screening for PSD in conjunction with collaborative care intervention including an interdisciplinary approach to patient care consisting of a structured plan of care, evidence-based treatment interventions, scheduled patient follow-ups and enhanced interprofessional communication results in better outcomes for this population.

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